SAMSUNG *M50*

The product images may differ from actual product appearance.

Manual

This manual describes how to use computer as well as information on Windows, Internet, Upgrade, and Troubleshooting.

The photographs used in this user manual may be somewhat different in shape and color to those of your computer depending on the model of your computer.

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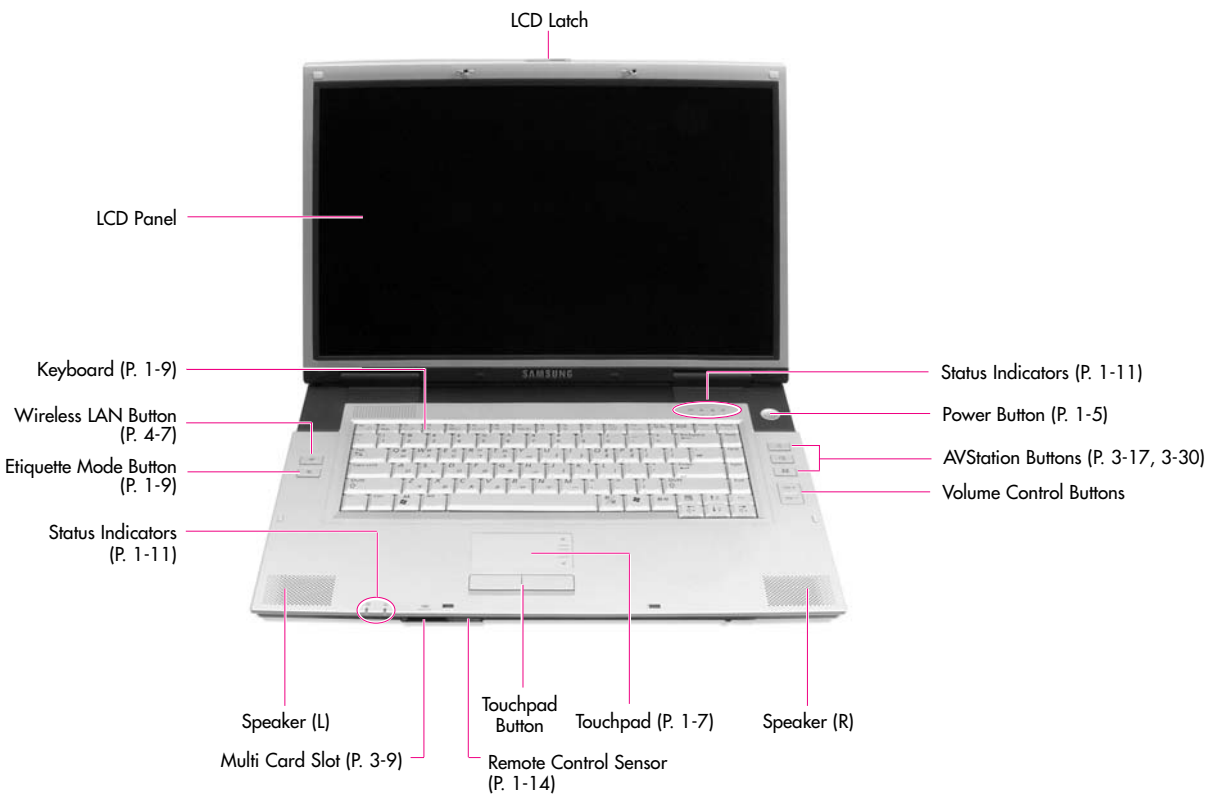
Chapter 1

Getting Started

This chapter provides basic information for using this computer. System overview and methods for general use are provided.

Introducing The Computer

Front View



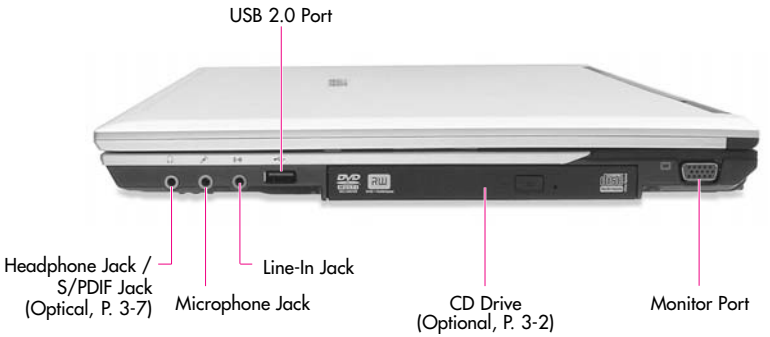
Note **AVStation Buttons**

AVStation is a multimedia program that enables users to play MUSIC, PHOTO and MOVIE files.

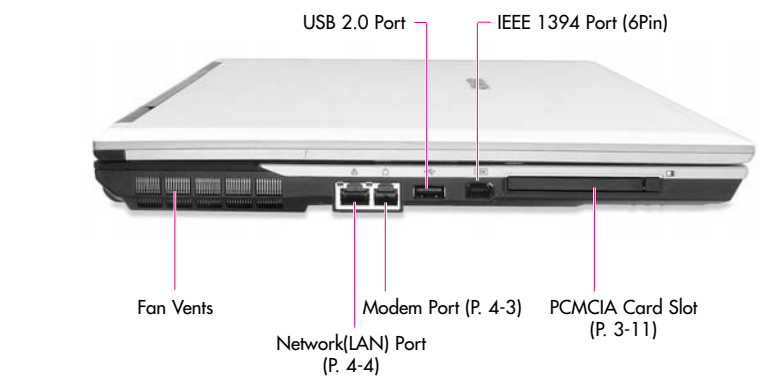
When the computer is turned off or in Hibernation, **AVStation now** is launched. (P. 3-30)

When the computer is turned on, **AVStation premium** is launched. (P. 3-17)

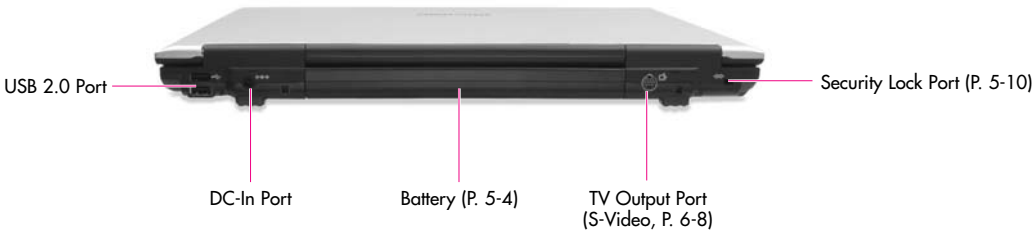
Right View



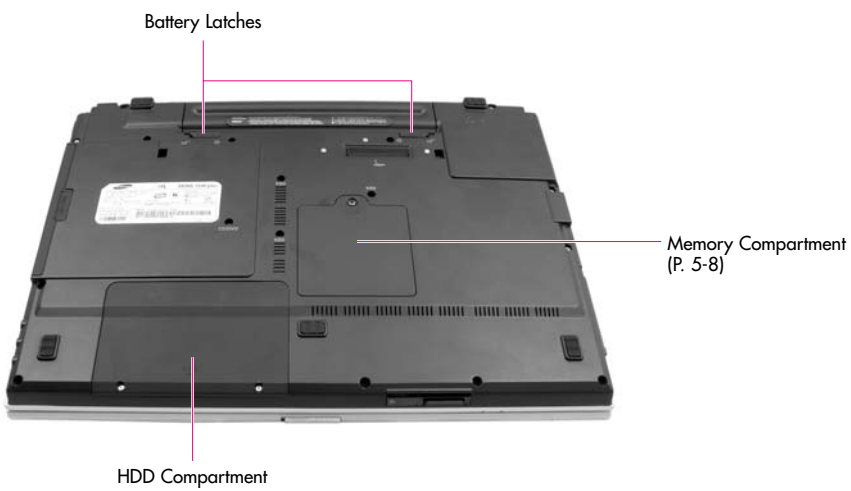
Left View



Rear View



Bottom View

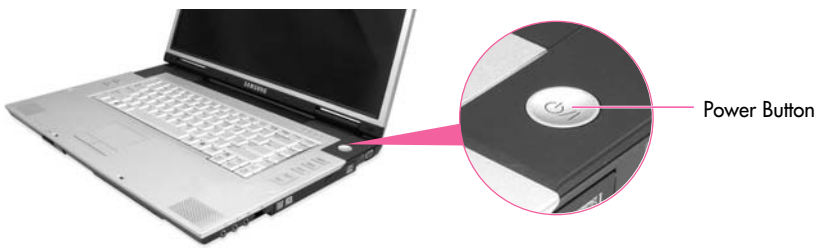


Caution Removing or disassembling the hard disk drive will void your warranty. To replace the hard disk drive, please contact your nearest Samsung Service Centre.

Turning the Computer On and Off

Turning On

1. Insert the battery and connect the power according to the supplied Installation Guide.
2. Lift up the LCD panel and open it to a comfortable angle.
3. Press and then release the power button to turn the system on.



Turning Off

1. Click the **Start** button on the Taskbar.
2. Select **Turn Off Computer**.
3. Click **Turn Off** from the [Turn Off Computer] window.

Caution If the computer has not turned off properly due to a system error, press and hold the power button for more than 4 seconds to turn the system off. After doing so, when you turn the system on, the system examination program is executed automatically.

Creating and Changing User Accounts

Multiple users can be registered in a single system so that each user may use their own customized working environment. Procedures to register and change user accounts are provided below.

■ Registering a new user

1. Click **Start** > **Control Panel**.
2. Click **User Accounts** > **Create a new account**.
3. Type a name for the new account, and click **Next**.
4. **Select the account type** and click **Create Account**.
   The new user account has been created.

Note **To login with an Administrator Account To delete a user account**

1. Click on a user account to delete and click **Delete the account**.
2. Select either **Keep Files** or **Delete Files**, and then click **Delete Account**.

■ Changing users

1. Click **Start** > **Log Off**.
2. Click **Switch User**.

3. In the [Windows Log On] window, select the desired **user name**.

Touchpad

Movement of the pointer (arrow) on the screen will correspond to movement made with a finger on the touchpad.

Touchpad buttons
the two buttons below the touchpad provide identical functions to buttons of a mouse.

Note **Locking the touchpad**

You can lock the touchpad and use only the keyboard and mouse. To lock the touchpad function, press the **<Fn>+<F9>** key combination.

■ Click (Select Function)

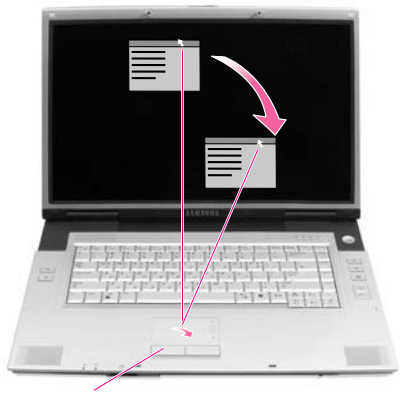
Place a finger on the touchpad, move the pointer on the screen to the icon or item to select, and tap the touchpad once. The click operation is also used to move the 'cursor' during document operations.

■ Double-click (Run Function)

Place a finger on the touchpad, move the pointer on the screen to the item to run, and quickly tap your finger on the touchpad twice.
Or double-click the left touchpad button.

■ Drag (Move / Select)

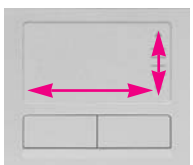
Drag and drop a part to the required place.



This button is held down
Place the touchpad pointer on the title bar of the window.

■ Using the Touchpad Scroll Function

The touchpad has a scroll function, which can be used like the wheel dial of a wheel mouse. Move up and down along the right edge of the touch pad (scrolling up and down) or left and right along the bottom edge of the touch pad (scrolling left and right) to scroll the screen. However, this may not apply to some programs.



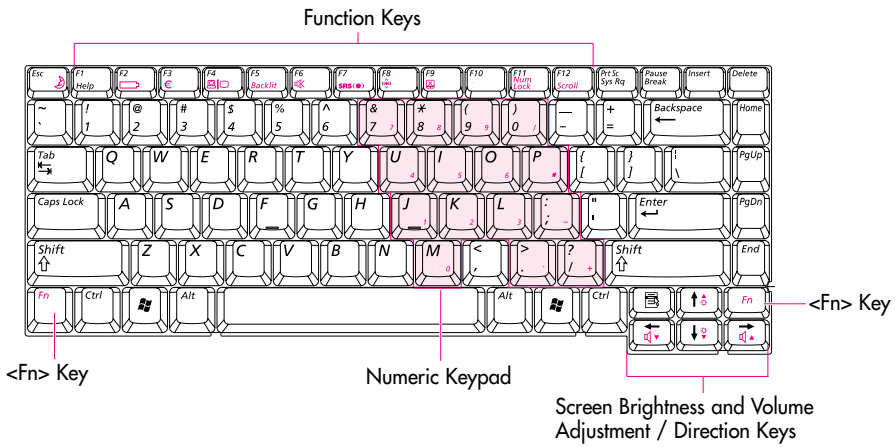
Caution

- Please use the touchpad only with your finger. Using sharp devices may damage the touchpad.
- Operating the touchpad or touchpad button while starting your system may increase the time required for starting Windows.

Note

- To utilize the touchpad buttons for other more diverse functions, please refer to the Mouse icon in the Control Panel.

Using the Keyboard



■ Special Function Keys:

The <Fn> key activates special functions when pressed in combination with other keys.

Key Combinations	Key Name	Function
	REST	Puts the computer into suspended mode.To use the computer again, press the power button.
	Gauge	Shows the current power source and the remaining battery charge.
	Euro	Used to type the symbol for Euro currency.
	CRT/LCD	Switches the display between the LCD and an external display device when an external display device is connected. (P. 6-8)
	Backlit	Turns the LCD on and off.
	Mute	Turns the audio output on and off.
	SRS	This feature enables you to experience more stereophonic sound. You can select one of the following modes by pressing the button. **Note** WOW XT ON Mode: Select to listen to music. TruSurroung XT ON Mode: Select to watch a movie. SRS OFF Mode: Switches off the SRS function. The SRS function is only supported through the built-in speaker of the computer and the headphones. It is not supported through the S/PDIF port.
	Wireless LAN	Turns the wireless LAN service on and off for appropriate models.
	Touchpad	Turns the touchpad function on and off.
	Etiquette Mode	You can select Etiquette Mode when you require a quiet operating environment. **Caution** In low-noise mode, the operational speed of a program may be slowed down because the CPU operates at minimum speed, and the system may overheat because the fan is rotating only at low speed.

Key Combinations	Key Name	Function
	Num Lock	Makes the keypad in the middle of keyboard available.
	Scroll Lock	Scrolls the screen up and down while the cursor position does not change in some applications.
	Volume Up	Increases the audio volume.
	Volume Down	Decreases the audio volume.
	Brightness Up	Turns the LCD screen brighter.
	Brightness Down	Turns the LCD screen dimmer.

Key	Function
	Screen Control Key Moves to the screen above or below, or moves the cursor to the beginning or end of the sentence.
	Windows key Display start menu.
	Application Key Provides the right button function of the touchpad.

Status Indicators

Shows the operating status of the computer.

Icon	Name	Description
	Num Lock	Turns on when the numeric keypad is activated.
	Caps Lock in upper case.	Turns on when all alphabet characters you type will be
	Scroll Lock	Turns on when it is set to scroll the screen up and down while the cursor position does not change in some applications.
	Hard Disk Drive / CD Drive	Blinks when the hard disk drive or CD drive is in operation.
	Wireless LAN	Turns on when wireless LAN function is enabled. (This light does not operate for the models without wireless LAN.)
	Charger	Blue - When the computer is operating on AC power and the battery is fully charged Amber - When the computer is operating on AC power and the battery is being charged. Off - When the computer is operating on battery power.
	Power	Turns on - when the computer is turned on. Blinks - when the computer is in Standby mode.

Adjusting LCD Brightness

There are 8 levels of LCD brightness (1:Dimmest~8:Brightest).

■ To adjust using keyboard

Press <**Fn**>+<[F8]> or <**Fn**>+<[F9]> keys from the keyboard to adjust LCD brightness. When changed, the current LCD brightness is displayed on the top left corner of the LCD screen for a few seconds.

Whenever you turn the system on or change the power source the brightness level changes according to the settings.

- when operating on AC power: Brightness Level 8
- when operating on battery power: Brightness Level 1

■ Adjusting the brightness using the Battery Manager

You can adjust the screen brightness using the Battery Manager. (P. 5-6)

Note

Maintaining your LCD brightness settings after turning the system off and on

1. Turn the system on. When the **Samsung Logo** appears, press the **<F2>** key to enter Setup.
2. In the **Boot** menu, change the **Brightness Control Mode** option to **User Control**.
3. Save the settings and exit Setup.

When using the Battery Manager, only the screen brightness set in 'Custom Mode' is maintained.

To save the battery charge

When your computer is operating on battery power, adjusting the LCD brightness level to dimmer diminishes the battery power consumption.

Bad pixels in the LCD

The limits of the LCD manufacturing technology allow a maximum of 10 abnormal or bad pixels, which do not affect system performance. This system may have the same level of abnormal or bad pixels as any other company's products.

Caution

Maintenance Instructions

When cleaning the LCD panel, use only computer specific cleaners on a soft cloth, and lightly wipe in one direction.

Adjusting the Volume

■ Adjusting the Volume using the Volume Control Button

Adjust the volume by using the **Volume Control Button** ( ).

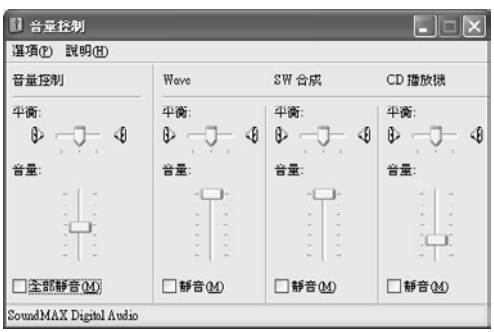
■ To adjust using keyboard

Press <**Fn**>+< > or <**Fn**>+< > from the keyboard.

■ Using the Volume Control Program

On the taskbar, click the **Volume** ( ) icon, and adjust the **slide bars**.

For advanced volume control options, double-click the **Volume** ( ) icon, and adjust the settings in the [Master Volume] dialog.



Caution : When you turn the system on, a booting noise may occur.

Using the Remote Control

Using the remote control for the computer is described below. To use the remote control, install the supplied battery into the remote control first.

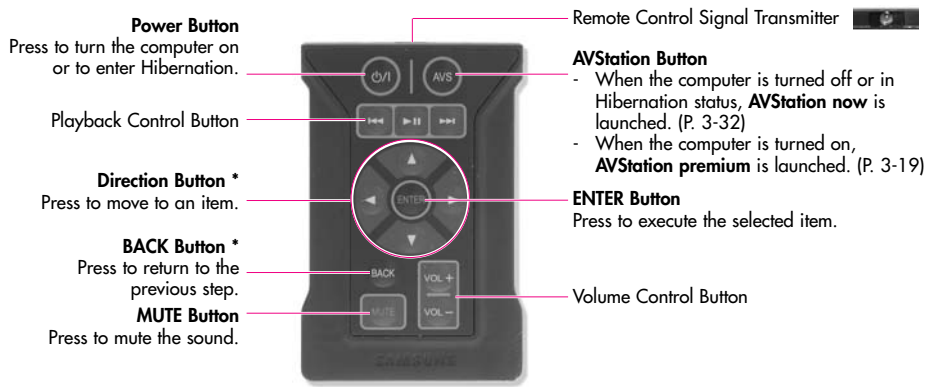
■ Installing Battery

Move the groove (•) on the cover to the ❶ position by using a coin and open the battery cover. (To open the cover, turn it counterclockwise.)

Insert the battery so that the **positive pole** (+) of the battery is towards the inside of the cover.

Move the groove (•) on the cover to the ❷ position by using a coin and open the battery cover by turning it clockwise.

■ Remote Control Buttons


Power Button
Press to turn the computer on or to enter Hibernation.
Playback Control Button
Direction Button *
Press to move to an item.
BACK Button *
Press to return to the previous step.
MUTE Button
Press to mute the sound.
Remote Control Signal Transmitter
AVStation Button
- When the computer is turned off or in Hibernation status, AVStation now is launched. (P. 3-32)
- When the computer is turned on, AVStation premium is launched. (P. 3-19)
ENTER Button
Press to execute the selected item.
Volume Control Button
AVS
ENTER
BACK
MUTE
VOL +
VOL –

Note Buttons indicated by (*) do not work in some applications. (e.g. Window Mode of AVStation premium, etc.)

■ Remote Control Operating Range

The valid distance for the remote control is determined by the user environment. It is recommended to use the remote control within 3 meters and a 45 degree angle from the remote control sensor on the device.

Note When the remote control is not being used, keep the remote control in the PCMCIA slot. To keep the remote control in the slot, insert the remote control into the slot so that the Remote Control Signal Transmitter faces outward.

Proper Seating Posture During Computer Use

The proper seating posture during computer use is provided here. Maintaining proper posture during computer use enhances performance and prevents physical bodily harm.

If necessary, use a footrest to raise the level of your knees and ease the pressure on the thighs.

Seating Posture

- Position the chair so that the eyes are slightly higher than the display panel.
- Straighten the neck and back.
- Place the legs naturally.
- If necessary, use a cushion to provide extra back support.
- Avoid working postures that require twisting the body or neck.

Lighting

- Soft, indirect lighting is recommended.
- Position the display panel so that external light does not reflect off the screen. Use curtains, if necessary.

Work Habits

- Take periodic breaks and stretch out stiff muscles regularly.
- Look outside the window or at distant objects frequently to relieve strain on the eyes.

Chapter 2

Introducing Windows

This chapter provides basic information on using the computer's main operating system Windows.

Windows XP Basics

Windows is the computer's main operating system, which needs to be familiarized with in order for efficiently computer use.

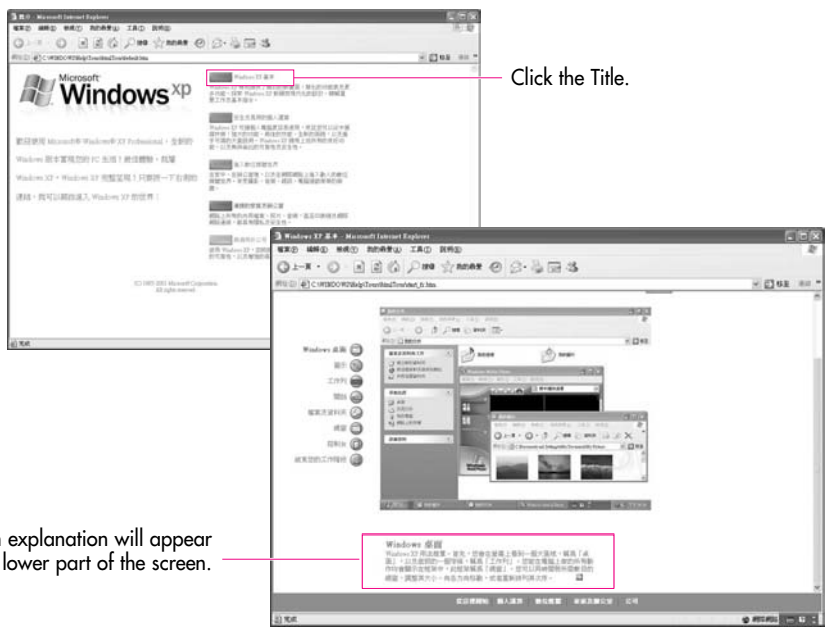
Windows XP Tour

A tour of the elementary functions provided by Windows XP.

Click **Start** > **Tour Windows XP**.

Or click **Start** > **All Programs** > **Accessories** > **Tour Windows XP**.

Click on the topics to find out about important functions of Windows XP.



Understanding the Desktop

The Desktop is the working area on the computer. It consists of the large workspace, which is more or less the entire the screen and a Taskbar at the bottom.

Start Button		Opens the Start Menu.
Taskbar		Displays programs that are currently running. Frequently used icons can be placed here.
Recycle Bin		Deleted files or folders end up here.
Language Bar		Enables switching between English/other languages text inputs and provides other text input services.

Understanding the Start Menu

The Start Menu includes everything that is required to start Windows.

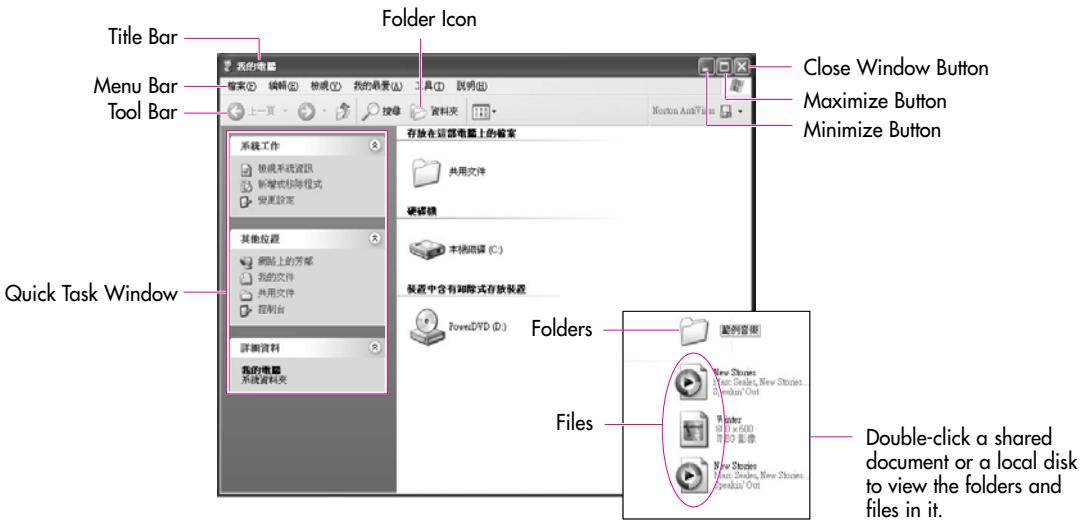
From the Start Menu it is possible to run a program, open a file, assign system users with the Control Panel, receive support by clicking Help and Support, and search desired items from computer or Internet by clicking Search.

My Computer		Displays the contents of the hard disk, the CD-ROM drive, the network drive, and floppy disks. It can also be used to search and open files and folders.
Control Panel		Enables users to configure settings on the computer.
Help and Support		Provides on-line help, information on Windows and troubleshooting.
Search		Enables users to search for information in files or the Internet.
Run		Runs programs or documents.

Understanding a Window

A window is the basic component in working with the computer. The My Computer window, which is a window for the computer's hard drive, will be used as an example here to show the basic composition of a window.

Click **Start** > **My Computer**.



Double-click the hard drive (local disk) to view internal folders and files stored in it. If the contents do not appear, click Show Contents.

Note

- **What is a Drive?** A storage device in which files and folders are saved in, and read from.
- **What is a Folder?** A folder is used to group and manage files systematically, and may include files in sub-folders. It is similar to a bookshelf.
- **What is a File?** A file is a document or various kinds of material that is generated as a result of program operation. It is also called data.

To view the entire structure of the drive

Click the Folder Icon in the Toolbar to view the entire structure. Click again to return to the Quick Task Window.

Help and Support Center

Help and Support Center provides references and troubleshooting information regarding computer use.

Please refer to help and support centre before calling the Samsung helpline.

Click **Start** > **Help and Support**.

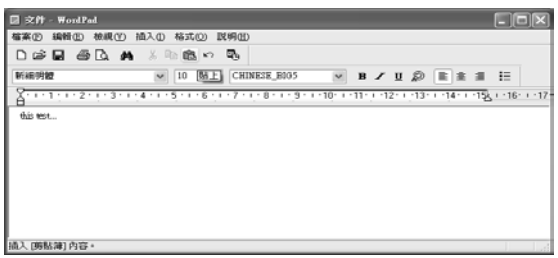
Displays Help Index
Related help information appears when a search keyword is entered.
Help Topics
Connect to Support Center. The computer has to be connected to the Internet
Computer information can be viewed and the problem can be diagnosed.
Troubleshooting Information
說明及支援中心
Windows XP Professional
選取一個說明主題
尋求協助
選擇一項工作
您知道嗎?

Document Operations

To create documents, WordPad or NotePad, which is included in Windows, or a separate specialized word processor program can be used, such as MS Word.
Instructions for creating documents using WordPad is provided here.

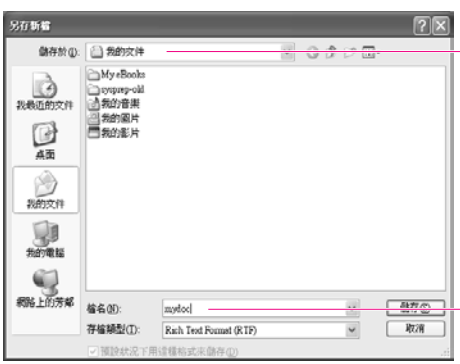
■ Creating a New Document

1. Click **Start** > **All Programs** > **Accessories**> **WordPad**
2. Create and edit your document. For more information about WordPad, refer to on-line Help.



■ Saving a Document

1. Select **File** from the Menu, and click **Save**.
2. Click on the Save in field to specify a folder to save the file in, enter the name of the file in the File Name field, and click **Save**.



■ Opening a Document

1. Click **Start** > **All programs** > **Accessories** > **WordPad**.
2. Select **File** From the Menu, and click **Open**.
3. Click on the Look in field and specify the folder in which the file is saved.
4. Select the file to open and click **Open**.

■ Printing a Document

To print a document, connect a printer to the computer.
For more information about connecting and configuring a printer, please refer to the printer manual.

To print a WordPad document
1. Turn on the printer, and insert paper.
2. Open the WordPad file to print.
3. Select **File** from the Menu and select **Print**.
4. Click **Properties**, adjust the printer options accordingly, and click **OK**.
5. In Print window, click **OK** to print the document.

Chapter 3

Using The Computer

This chapter investigates various different functions of the computer and provides information on using the related application programs for them.

Using the CD-ROM Drive

This computer has one of the following CD drives.

- CD-RW/DVD-ROM Combo Drive	Read a CD/DVD, and writes data onto a CD.
- DVD-Super Multi Drive	Reads CD/DVDs and writes data to CD/DVDs. Supported DVD types include DVD±R, DVD±RW and DVD-RAM.

Note A CD-ROM drive is optional. For more detailed product specifications, refer to the product catalog.

1. Press the eject button on right side of the CD drive.
2. When the tray slides out, place a CD onto it and push down until it clicks.

3. Push the CD tray in gently. The CD will run automatically.

Note To eject a CD when the CD drive is out of order or the system is turned off, unfold a paper clip, and insert the unfolded end of the clip into the hole ( ) and press until the CD tray opens.

Caution To clean a CD or DVD title, clean the disc with a soft clean cloth by wiping from the center outwards.

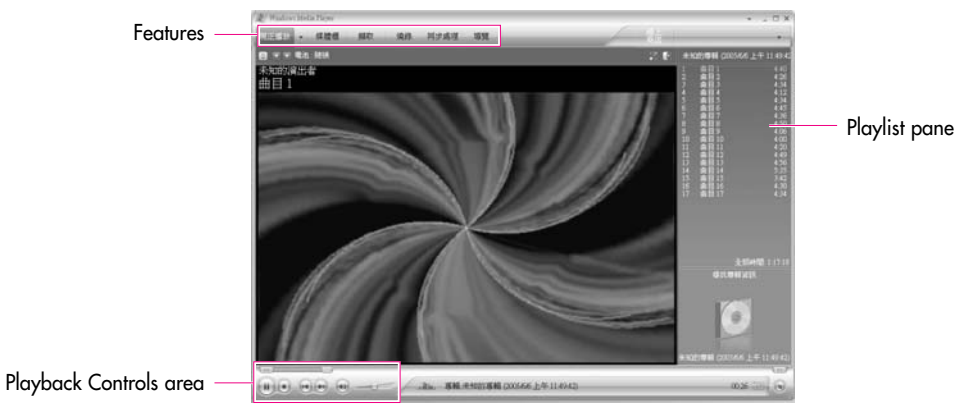
Do not eject the CD while the Status Indicator is on.

Using the Windows Media Player

Window Media Player enables you to play and manage audio and video files.

Click **Start** > **Windows Media Player**.
Or click **Start** > **All Programs** > **Accessories** > **Entertainment** > **Windows Media Player**.

Running the program the first time displays the set up screen. Define the settings according to the instructions displayed on the screen.
When you complete the settings, the following screen appears.



Note **To view detailed information on how to use Windows Media Player:**
Run Windows Media Player and right-click over the Function Taskbar and select **Help > Windows Media Player Help**

To Play an Audio CD

1. Insert an audio CD into the CD drive, and a list of all available players is displayed automatically.
2. Select **Windows Media Player**, and click **OK** to play the audio CD.

To Play a Video CD

1. Insert a video CD into the CD drive.
2. When a video window appears, double-click the **MPEGAV** folder.
3. Double-click the **DAT** file.
4. When a warning window appears, click the **Open with** button.
5. In the new window, click **Select Program from List** and click **OK**.
6. Select the **Windows Media Player**, and click **OK**.
   The video will start playing.

To Write Data in CD

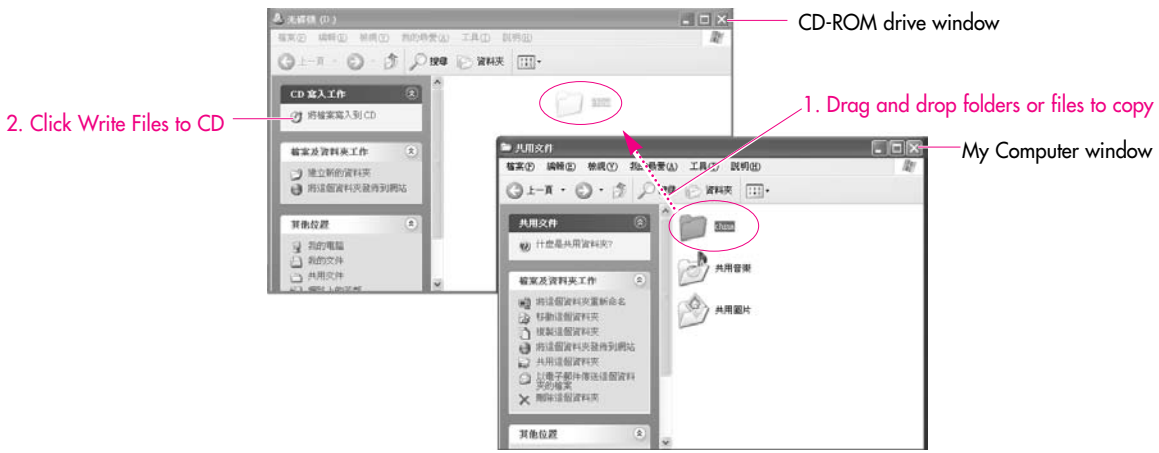
If your computer has CD-RW functionality, you can copy data to a blank CD or create an audio CD.

Note : An additional CD writing program is supplied in an additional CD.

1. Insert a blank CD into the CD-RW drive.
2. Click **Open Writable CD Folder** and click **OK**. The CD-ROM drive window appears automatically.

3. Click **Start** > **My Computer**.

4. Select, drag and drop folders or files to copy onto the CD-ROM drive window. Click **Write Files to CD** in the CD-ROM drive window.



5. When the CD Write Wizard appears, enter the **CD label**, and click **Next**. The data will begin copying.
6. When copying is completed, a 'completed' message will appear and the CD-ROM drive will open automatically.

Note

For more information on copying CDs

Click Start > Help and Support. Enter [CD copy] in the search field, and click the Search button.

To Burn an Audio CD:

Run Windows Media Player and right-click over the Function Taskbar and select **Help > Windows Media Player Help** from the popup menu.
Select **Using the Player > Using CDs, DVDs and VCDs > Using CDs > Burning your own CD > To burn your own CD** to see detailed information.

Enjoying Home Theater

This product supports 5.1 channel output, which is a basic function for home theater systems, and DVD drives. It provides 3D surrounding sound and vivid screen.

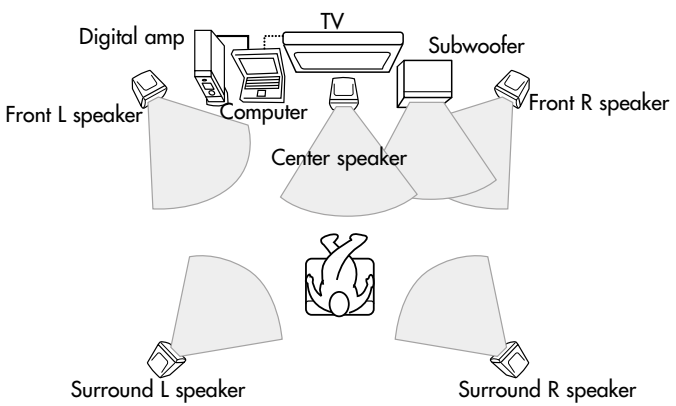
Note Home theater system usually consists of a TV, DVD, 5.1 channel speaker, and digital amp and provides a high-resolution screen (MPEG2) and 3D surrounding sound (Dolby 5.1 or DTS). With a home theater system, you can enjoy a vivid screen and sound in your home as if you are in a movie theater.

The following devices are required to enjoy a home theater system.

- 5.1 channel speaker system (amplifier, speakers, connection cables) (Purchased separately)
- DVD drive and DVD playing program on the computer
- DVD title that supports 5.1 channel (Purchased separately)

■ Step 1. Connect 5.1 channel speaker system to your computer

1. Connect the S/PDIF jack of the system and a 5.1 channel amplifier.
2. Connect speakers to the amplifier. (See the User Manual for the Speakers)
3. To view through a TV, connect the TV and change the current display device to TV in the Display Properties. (See 'P. 6-8 Connecting to a TV'.)



■ Step 2. Setting the Sound to Digital Sound Output on the Computer

Since the sound of the computer is set to Digital Output by default when purchasing the computer, additional settings are not required. You can confirm the setting as follows.

1. Double-click the **Volume** ( ) icon in the notification area of the Taskbar and select **Options > Advanced Controls**.
2. Click the **Advanced** button below the Master Volume and check if the **1 Disable Digital Output** item is unselected.
   The option must be unselected for sound to be output in digital format.

■ Step 3. Enable S/PDIF on the DVD program

When using 5.1 channel speakers, you need to install the Power DVD program from the Power DVD Installation CD separately supplied and then change the settings as directed in these steps:

1. Run Power DVD and click the **Settings** button.

2. On the Audio tab, set the Output setting to '**Use SPDIF Output**'.

Now, you can enjoy home theater using DVD titles.

Caution To control volumes for your 5.1 channel speaker, use the control on the digital amp. (Please, refer to the speaker manual.)

Using the Multi Card Slot

Using the Multi Card Slot, you can use memory cards such as a Memory Stick, Memory Stick Pro, SD Card, MMC, or xD Card. A memory card is used as a removable disk and is useful for exchanging data between a computer and a digital device such as a digital camera.

Memory Stick

Memory Stick Pro

SD Cord

MMC

xD Cord

Caution **Restrictions on Using Memory Cards**

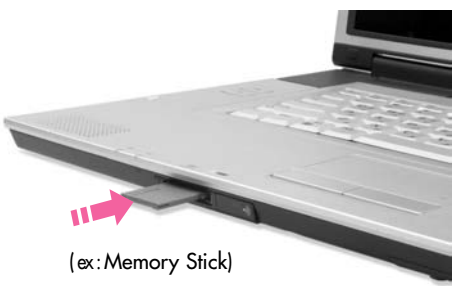
You can use memory cards for storing data only. Copyright protection function is not supported.

■ To insert and use a memory card

Caution **Remove the Slot Protector first, before using the Multi Card Slot.**

Press the end of the Slot Protector lightly, and remove the Slot Protector when it pops up.

1. Insert a memory card into the Multi Card Slot.



(ex: Memory Stick)

2. Click **Start > My Computer**. The inserted memory card is displayed.

MemoryStick (E:)

(ex: Memory Stick)

3. You can write data to the memory card. If the memory card is not formatted yet, format the memory card before use.

Caution Since the memory card may be easily mislaid when moving your computer, keep the memory card separately.

■ To remove a memory card

1. Press the end of the memory card softly to pop it outward.
2. Remove the memory card.

■ To format a memory card

You can use a memory card after the format operation. The procedures to format a memory card are described below.

Caution Since format operation deletes all data in the memory card, please make sure that there is no important data in the memory card before formatting.

Note **To protect the data in the memory card**

Set the write protection tab of the Memory Stick or SD memory card to the Lock position.

1. Click Start > My computer.
2. Press the right touchpad button on the memory card drive, and select Format from the pop-up menu.
3. Click Start to start the format operation.

Caution To use a memory card in both the computer and other digital device such as digital camera, it is recommended to format the memory card in the digital device. If you format the memory card in the computer, you may have to format the memory card in other digital device again to use the memory card in the digital device.

Using the PCMCIA Card Slot

Various different functions can be added by inserting PCMCIA cards into the system. This system supports 16 / 32 bit, type I or II PCMCIA card types.

Caution **Before using the PCMCIA slot, remove the slot protector.**

Push the eject button of the PCMCIA card slot once to pop it out. Push the button again to eject the slot protector.

1. Insert a card into the PCMCIA card slot on the side of the system.

2. When a card is inserted, Windows automatically installs the necessary driver for the card. If no available driver can be found by Windows, the driver has to be installed using the disk supplied with the card.

Note **To remove PCMCIA card**

a. Double-click Safely Remove Hardware icon ( ) in Taskbar.
b. Select the appropriate PCMCIA card and click Stop button.
c. When 'Safe to remove Hardware' window appears, click OK.
d. Press Eject button at PCMCIA card slot once, then the button pops out.
e. Press the projected button to eject the PCMCIA card.

Caution You cannot use a ZV card and a PCMCIA III card through the PCMCIA card slot of the system.

Using EasyBox

Use EasyBox program to make use of Windows' complicated function easily andconveniently.

Learn about EasyBox

Double-click the **EasyBox**( ) icon on the desktop.
(Or select **Start > All Programs > Samsung > EasyBox > EasyBox**.)

- **System** : System management features are available, including disk defragmenter, removing unnecessary files/folders, computer scheduling and system recovery.
- **BIOS** : In windows-based mode, you can recover the BIOS defaults and change the boot sequence.
- **Desktop** : Desktop management features include changing the font size, executing a magnifier function, the start menu settings and managing the quick launch icons on the taskbar.
- **Security** : Here you can configure the security settings supported by Windows XP SP2. You can also change the configuration of the firewall settings, Windows automatic updates and blocking pop-ups when connected to the Internet.
- **Plus Tip** : This is a collection of additional Windows functions that are useful for system management. (Offering shortcut descriptions of Windows, configuring network sharing and opening local folder sharing, etc.)

Using EasyBox

The security management function will be used as an example here to show the function of Easybox

■ Configuring Firewall

The Windows Firewall prevents unauthorized users from gaining access to your system via the network or the Internet.

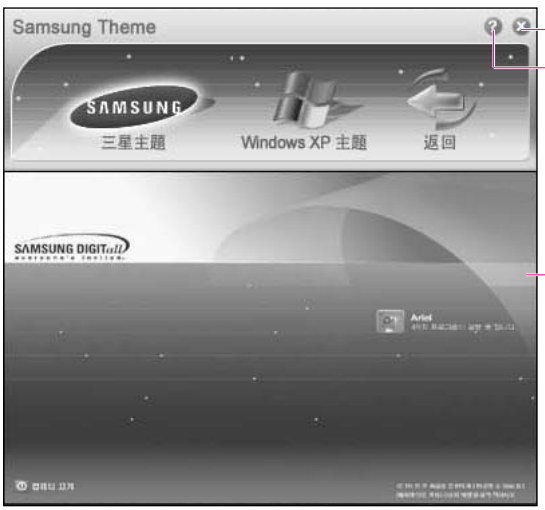
1. Click **Start > All Programs > Samsung > EasyBox > EasyBox**.
2. Click **Security** from the top menu bar.
3. Select **Windows Firewall Settings** from the Security menu on the left.
4. Select a firewall level.
5. Click **Apply**.

Click the User Setting button for advanced features, including exceptions and permissions.

Using Samsung Theme

Samsung Theme is a program that enables a user to easily switch a theme (desktop, logon screen and sound effect).

Double-click the **Samsung Theme** ( ) icon on the desktop.
(Or select **Start > All Programs > Samsung > Samsung Theme > Samsung Theme**.)



- **Samsung Theme** : Switches to Samsung Theme (desktop, logon screen and sound effects on booting).
- **Windows XP Theme** : Switches to the Windows XP default Theme.
- **Back** : Restores the theme to its previous status.

Using Samsung Update Plus

Samsung Update Plus is software that examines and updates Samsung software and drivers installed on your Samsung computer to the latest version. To use Samsung Update Plus, your computer has to be connected to the Internet.

■ To Update Samsung Software and Drivers

1. Select **Start > All Programs > Samsung > Samsung Update Plus > Samsung Update Plus**.

Note If this is the first time you are running the program, a window will appear asking you if you agree to the agreement in the window. Click Agree to use this software.

2. Click **Search for and Install Updates** and click the **Search for Updates** button.

3. If there are available software or driver updates for your computer, the available updates will be listed. Select the required updates from the list and click Install Update to start the update.

Update List

(The update list on the screen may differ depending on the computer model.)

Note

Updates that must be installed separately.
If you select an update that must be installed separately, a message appears informing you of this. Follow the instruction message to correctly install it.

Automatic update items display
By default, your computer is configured to automatically search for updates. If there is a new update available, this is notified in the notification area. Click the balloon help icon in the notification area. Here you will be able to find the latest available updates.

To change the automatic update settings, click the Custom button in Figure 2 and change the settings.
: Samsung Update Plus does not provide updates for additionally installed software and device drivers.

Using AVStation premium

Note : AVStation premium is provided for some models.

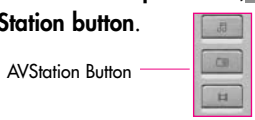
AVStation premium is an integrated multimedia program that allows you to watch video (pictures, video and movies) and listen to music.

You can start AVStation premium as follows.

Method 1. Select **Start > All Programs > Samsung > AVStation premium > AVStation premium**.

Method 2. Double-click the **AVStation premium** ( ) **icon** on the Desktop or Taskbar.

Method 3. Click the **AVStation button**.



Method 4. Click the **AVS button** on the remote control. (P. 1-14)

Note : The function button on the remote control only works in AVStation premium Play Mode. (P. 3-27)

Using AVStation premium

■ AVStation premium Modes

AVStation premium provides 2 modes, **Window** and **Play** modes.

Window mode Screen

Play Mode Screen

▶ **Window mode** : You can use all AVStation premium functions.

▶ **Play Mode** : This provides an easier-to-use user interface than that of Standard mode. In this mode, the Edit/Create function and the **MOVIE EDITOR** menu are not supported (see P. 3-25).

Note

- This Manual mainly describes the procedures for using the **Window mode** of AVStation premium.
- The captured program screen shots in this manual may differ slightly from the actual software depending on the version of the program.
- For more detailed use procedures, refer to the on-line Help.

■ AVStation premium Screen Layout and Menus

The AVStation premium **Window mode** screen has the following layout.

AVStation premium **Window mode** consists of the following 4 menus.

- ▶ **MUSIC** : Using this menu, you can play music files or audio CDs, copy audio CDs to the computer as well as burn audio CDs.
- ▶ **PHOTO** : Using this menu, you can view or edit pictures (image), view pictures through a Slide Show, create an album and burn an album onto a CD.
- ▶ **MOVIE** : Using this menu, you can play a video (movie) file or a DVD/VCD title. (You can only play a DVD title after installing **Power DVD** or a DVD player program.)
- ▶ **MOVIE EDITOR**: Using this menu, you can edit a movie file.

Note

- To handle multimedia files conveniently, register the multimedia files to the library. (See P. 3-26 'Registering a File'.)
- To access a file not registered to the library, select **File > Open File** and select the file.

■ Selecting the AVStation premium Menus

To select a menu, select the required menu from the Menu Selection Bar.

MUSIC

This section describes the procedures to play music files or audio CDs, to copy audio CDs to the computer as well as burn audio CDs.

Select **MUSIC** from the Menu Selection Bar.

■ Playing a Music File

1. Double-click **Music** in the left category pane and double-click on **All musics**.
2. Double-click the music file that appears at the bottom screen to play it.
   - **To play multiple music files**, select the music files and click on **Add**. The music files will be played in the added order.

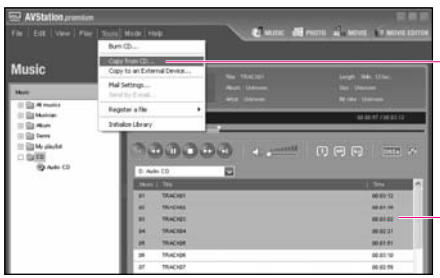
■ Playing an Audio CD

1. Insert an audio CD into the CD-ROM drive.
2. When the Audio CD window appears, select **using Samsung AVStation premium** and click **OK**. Then the audio CD is played.
   - To play an audio CD in the CD-ROM drive, double-click CD from the Category and double-click on **Audio CD** when **Audio CD** appears in the bottom screen.

Audio CD window

■ Copying an audio CD to the Computer

1. Insert an audio CD into the CD-ROM drive.
2. When the Audio CD window appears, select **using Samsung AVStation premium** and click **OK**.
3. Select a track to be copied to the library and then select **Tools > Copy from CD**.
   - To select multiple tracks, select the tracks while pressing the Shift or Ctrl key on the keyboard.



Select **Copy from CD**

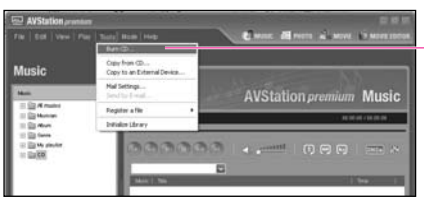
Select the tracks to be copied.

4. The selected tracks are copied from the audio CD. When the copy operation is completed, the Copy Completed message will appear.

   The copied tracks are saved in the **My Documents > AVStation premium > Music > Music From CD** folder.

■ Burning an Audio CD

1. Insert a blank CD into the CD-ROM drive. When the **CD Drive** window appears, click **Cancel**.
2. Select **Tools > Burn CD**.



Select **Burn CD**

3. Select **Burn Audio CD** and click **Next**.
4. Double-click **Music** in the left title and double-click **All musics**.
5. Select music files from the list and click the **Add files from my PC to the CD burning list** ( ) button to move the selected files to the right **Burn Audio CD** window. When you have added all music files, click **Next**.
6. Select a CD Writer and click on **Start**. When the Burn CD window appears, click **OK** to create the audio CD.

■ Creating a Playlist

A Playlist is a list of selected music files that has been created by a user so that the selected files can be played later.

1. Select the music files to be included in the Playlist from the music category and click on **Add**.
2. When you have added all the music files you want, click on **Save As Playlist**.
3. Register a new playlist name, and click **OK**.
4. When the completion message appears, click **OK**.

   The created playlist is saved in the **C:\Program Files \Samsung\AVStation premium\My Playlist** folder.

Note **Playing a Playlist**

1. Click on **Load Playlist** at the bottom of the Library window
2. Select a Playlist and click **OK** to start the playback.

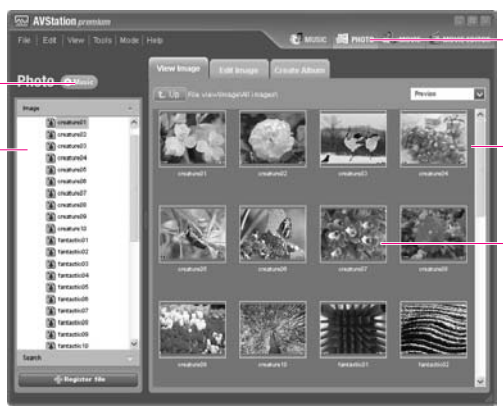
PHOTO

This section describes the procedures to view pictures (images), to view pictures through a Slide Show, to edit a picture, to create an album, and to burn an album onto a CD.

Click on **PHOTO** in the Menu Selection Bar.

■ Viewing and Editing a Picture

1. Double-click on **Image** in the left category pane and double-click on **All Images**.
2. The image files are displayed in the right Image window. To zoom-in on an image, double-click the image file.


⊕ MUSIC
You can listen to the music files in My Playlist or All musics while editing an image.
Image Category
PHOTO Menu
Image Window
Double-Click An Image File To Zoom-In on The Image.

Note

Viewing the Image List

Select **View Image** List from the menu at the bottom of the zoomed image screen.

Viewing an Image through the Slide Show or Full Screen

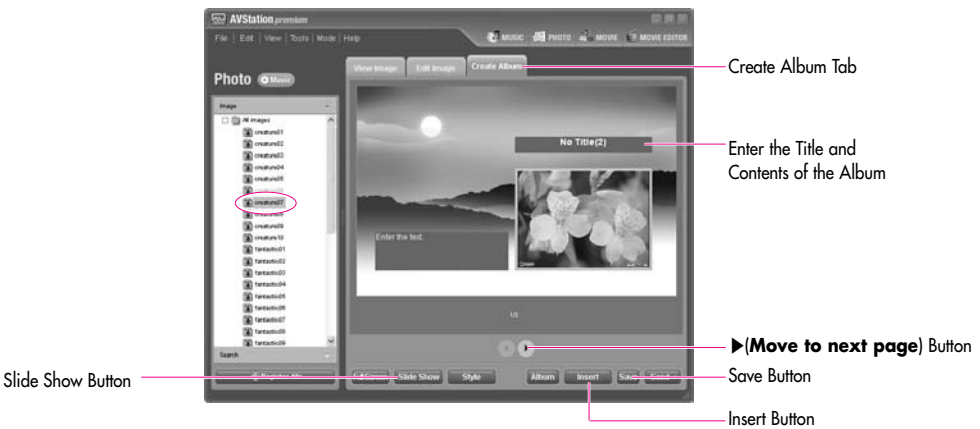
Select **Slide Show** or **Full Screen** from the menu at the bottom of the zoomed-in on image screen.
To exit SlideShow or Full Screen, press the <**Esc**> key or right-click and then select **Exit SlideShow** or **Exit Full Screen**.

Editing an Image

1. Select an image to edit and select the **Edit Image** tab.
2. Edit the image using the **Shape/Edit/Effect** tool and click on **Save** or **Save Copy**.

■ Creating an Album

1. Select the **Create Album** tab.
2. Select an album cover style and click **Apply** to apply the selected style to the album cover.
3. Enter the title and contents of the album, insert an image and then click ▶ (**Move to next page**).
   - To insert an image into an album cover, select a file in the All Image pane on the left and then click the **Insert** button or double-click the file to be inserted.



4. Create an album by adding images and image descriptions to the album.
5. When creating an album is complete, click on **Save** to create the album.

   The created album is saved in the **My Documents > AVStation premium > Photo > Photo Album** folder and will be displayed in the Album category.

   - **To view an album**, double-click on Image in the left category pane and double-click on Album. Click on Slide Show in the Image window to view the images within the album through the Slide Show.

■ Burning an Album onto a CD

1. Double-click on the album to be burnt to CD in the left Album category.
2. Insert a blank CD into the CD-RW drive. When the **CD Drive** window appears, click on **Cancel**.
3. Select **Send > Burn CD** from the menu at the bottom of the Album window.
4. Enter the CD title in the Burn a CD window and then click **OK** to burn a CD with the album.

MOVIE

This section describes the procedures to play a movie file or a DVD/VCD title.

Click on **MOVIE** in the Menu Selection Bar

■ Playing a Movie

1. Double-click on **Movie** in the left category pane and double-click **All movies**.
2. Double-click a movie file to play it.

⊕ MUSIC
You can listen to the music files in My Playlist or All musics while working.
Movie Category
MOVIE Menu
Movie Window
Media Play Control Button

Note

You can adjust the screen size in the **View** menu.

Playing a DVD Title

To play a DVD title, first install the DVD **Power DVD** player software.

1. Insert a DVD title into the DVD drive.
2. When the **Select Work** window appears, select **using Samsung AVStation premium** and click **OK** to play the DVD title.
   If the DVD does not automatically play or the DVD title is in the DVD drive, double-click the Title of the DVD in the DVD / VCD category.

Playing a VCD Title

1. Insert a VCD title into the CD drive.
2. Double-click the Title of the VCD in the **DVD / VCD** category.

Movie Editor (Editing a Movie)

This section describes the procedures for editing a movie.

Click on **MOVIE EDITOR** in the Menu Selection Bar.

■ Editing a Movie

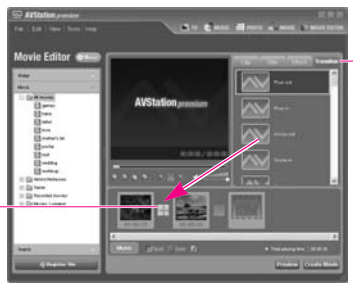
The procedures for merging two movie files and for inserting transition effects between movies are described below.

1. Click on **MOVIE EDITOR**. A new project will open.
2. Double-click **Movie** in the left category pane and double-click **All movies**.
3. Drag and drop a movie file to the Storyboard. When a Storyboard appears in the right pane, drag and drop another movie file to the Storyboard.

▶ **To Enter the Title** : Click on **Text Box** from the **Title** tab, create a text box by dragging the pointer and enter a title. Enter the title and then click **Apply**. The title is inserted at the beginning of the Storyboard.

▶ **Screen Effect** : Select an effect from the **Effect** tab and drag and drop the selected effect onto the movie in the Storyboard to apply the effect.

▶ **Transition** : Select a Transition effect from the **Transition** tab and drag and drop the selected effect onto the movie in the Storyboard to apply the transition effect.



Select a Transition Effect and drag and drop it onto the position to insert the effect.
Position of the Transition Effect

Transition Tab

▶ **Background Music** : Click on **Music** and select a music file to apply the background music to the movie file.

4. When finishing editing a movie, click on **Create Movie** and click **OK** to create the edited movie as a movie file.

   The edited movie is saved in the **My Documents > AVStation premium > Movie > Edited Movie** folder and will be displayed in the My Movie category.

Registering a File

By registering multimedia files to the library, you can easily access and manage them since they will be appear in the corresponding category of either the Music, Image, Movie categories on the left-hand side of the screen.

The procedures to register an entire folder to the library will be used as an example below.

1. Click on **Register** File at the bottom of the screen.
2. Click on **Add by folder**, and select the folder to be registered and then click **OK**.
3. When the registration is completed, click **OK**.
   The registered multimedia folder will be displayed in the music, image, or video categories of the library.

Note To play a file not registered to a category, select **File > Open File** and select the file.

Using Play Mode

This section describes how to use the Play Mode of AVStation premium.

To use Play Mode, select **Mode > Play Mode** in the Window Mode Menu Bar. Alternatively, click the **AVS** button on the remote control.

Note For more remote control use procedures, refer to 'Using the Remote Control'. (P. 1-14)

■ Play Mode Screen Layout

The initial screen of AVStation premium **Play Mode** has the following layout.

Move Bar
This appears only when the mouse pointer is over it.

Move to the Initial Screen of Play Mode

Switch to Window Mode

Exit Program

Minimize Screen

Menu

Note

To switch to Window Mode, move the mouse (or touchpad) and click the Window icon from the toolbar at the top of the window.

■ MUSIC

The procedures to play a music file or an audio CD will be described below.

Double-click **MUSIC** in the initial screen of Play Mode.

Category Window

Repeat Button
Track, All Tracks, Random

Media Play Control Button

Library Window

Operation Display Window

Note

Playing a Music File

1. Double-click a category from the left category window
2. Double-click a music file in the right library window. The music will be played.

Playing an Audio CD

1. Insert an audio CD into the CD-ROM drive. **Audio CD** will be displayed in the library window.
   To play an audio CD in the CD-ROM drive, double-click on **CD** in the category.
2. Double-click **Audio CD** in the library window. The tracks of the CD will be displayed.
3. Double-click a track to play it.

To Listen to All Tracks

Select Play All Tracks from the Media Play Control button.

■ PHOTO (Viewing a Picture)

he procedures for viewing pictures (images) and for viewing pictures through the Slide Show will be described.

1. Double-click on **PHOTO** in the initial screen of Play Mode.
2. Double-click **All Photo** from the left category and double-click an image file in the Library window.

PHOTO
All Images
Category Window
Library Window
⊕ MUSIC
You can listen to the music files in My Playlist or All musics while working.

Note

Viewing an Image through the Slide Show or Full Screen

Select Slide Show or Full Screen from the menu at the bottom of the zoomed image screen

■ MOVIE (Playing a Movie)

The procedures to play a movie file or a DVD/VCD title will be described below.

1. Double-click **MOVIE** in the initial screen of Play Mode.
2. Double-click **All Movie** from the left category and double-click a video file in the right pane.

MOVIE
All movies
Category Window
Library Window
⊕ MUSIC
You can listen to the music files in My Playlist or All musics while working.

Note

Playing a DVD Title

1. Insert a DVD title into the DVD drive.
2. When the **Select Work** window appears, select **using Samsung AVStation premium** and click **OK** to play the DVD title.
   If the DVD is not automatically played or the DVD title was in the DVD drive, double-click the Title of the DVD in the DVD / VCD category.

Playing a VCD Title

1. Insert a VCD title into the CD drive.
2. Double-click the Title of the VCD in the **DVD / VCD** category.

Using AVStation now

Note AVStation now is provided for some models.

AVStation now is an integrated multimedia program that allows you to watch video (pictures, video and movies) and listen to music without booting into Windows.

Using AVStation now

How to launch AVStation now and the AVStation features will be described below.

Note
- The use procedures of AVStation now are similar to those of **Play Mode** of AVStation premium.
- AVStation now only supports the player and view functions. To register files to the library, use the registration function of AVStation premium.

■ Launching AVStation now

Note You can only use AVStation now when your computer is turned off or it is in maximum power saving mode (see P. 5-2)

To launch **AVStation now**, click the **AVStation** button.

Alternatively, click the **AVS** button on the remote control.

Note For more remote control use procedures, refer to 'Using the Remote Control'. (P. 1-14)

■ Exiting AVStation now

1. Press the <**Esc**> key or right-click to move to the start screen of AVStation now.
2. In the start screen, press the <**Esc**> key or select Exit.
3. In the Exit window, select Exit.

Note
- Booting and using the computer when using AVStation now
- Select <**Go Window**> from the Exit window. Your computer will start.

■ AVStation now Menus

AVStation now consists of the following 3 menus.

- ▶ **MUSIC** : Using this menu, you can play a music file or an audio CD.
- ▶ **PHOTO** : Using this menu, you can view a picture (image) and view a picture through the Slide Show.
- ▶ **MOVIE** : Using this menu, you can play a video (movie) file or a DVD/VCD title.

Using AVStation now

The procedures for using AVStation now will be described below.

■ The To Move, Select and Run Menus

In AVStation now, you can use the keyboard, mouse, and remote control.

- ▶ **Moving a Menu or an Item**
  Press the **direction** keys on the keyboard or move the mouse to move the **cursor** to a menu or item and then click it. Or press the **Direction** button on the remote control.
- ▶ **Selecting or Running a menu or an Item**
  After you move to a menu or item, press the <**Enter**> key on the keyboard or double-click it. Or press the **Enter** button on the remote control.
- ▶ **Returning to the Previous Screen**
  Press the <**Esc**> or <**Backspace**> key on the keyboard, or right-click it. Or press the **BACK** button on the remote control.

■ MUSIC

The procedures for playing a music file or an audio CD will be described below.

1. Select the **MUSIC** menu and select Category. For example, move to **All Music**.
2. In the Library window, select a music file to be played.

Note

Media Play Control Button
You can only use the Media Play Control button when a music file is being played.

Playing Multiple Tracks
1. Play a music file.
2. Move the focus to the left Category pane, and select the **Play All** button.

Playing an Audio CD
1. Insert an audio CD into the CD-ROM drive, and select **CD** from the Category pane.
2. In the right Library window, select a track to be played.

■ PHOTO

The procedures for viewing pictures (images) and for viewing pictures through the Slide Show will be described below.

1. Select the **PHOTO** menu and move to the **All Photo** category.
2. In the Library window, select an image to view.

All Images

Category Pane

Media Play Control Button

⊕ **MUSIC**
You can listen to the music files in My Playlist or All Music while working.

Image Files

Library Pane

Note **Viewing an Image through the Slide Show or Full Screen**
In the lower menu of the zoomed-in image, select **SlideShow** or **Full Screen**.

■ MOVIE

In the Library window, select a video file to watch.

1. Select the **MOVIE** menu and select a category. For example, you can select **All Movies** by using the direction keys.
2. In the Library window, select a video file to watch.
   The selected movie file will be played.

All Images

Category Pane

Video Files

Library Pane

Note

Playing a DVD/VCD title

Insert a DVD/VCD title into the DVD-ROM drive and select DVD/VCD from the Category pane.
After a short while, the DVD/VCD title will be played

Using the DVD/VCD Play Control Button

To use the Play Control button while playing a DVD/VCD title, press a key or move the mouse.

To play a DVD title for the first time using AVStation now, launch the DVD player in Windows once before starting play.

The region code of a DVD title must be set to Windows status for AVStation now to play the DVD title properly.

Tips

- **Using the Library (File)**
  AVStation Now can use the library of AVStation premium.
  To use the library in AVStation Now, register the library in AVStation premium. (See 'Registering a File' in AVStation premium.)
- **HDD Category**
  You can play unregistered files on the hard disk drive in the HDD category of each menu. (C drive is supported.)

Notice

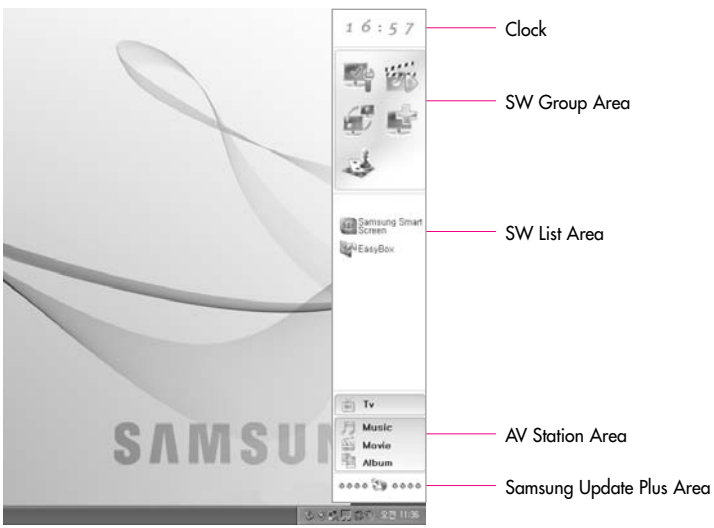
- **Do not remove the Recovery Solution Program.**
  Removing the Recovery Solution Program also removes AVStation Now. Once the program is removed, you cannot reinstall it, therefore take care not to remove the program.
- **You cannot use an additionally created Playlist.**
  You cannot use an additionally created Playlist other than the Playlist provided with AVStation premium in AVStation now.
- **A movie file or a movie title not supported by AVStation Now**
  To play a movie file or a movie title not supported by AVStation Now, please use AVStation Premium after booting your computer.
- **For Cases where you cannot preview using the PHOTO/MOVIE menu**
  1. When you did not create a Preview in AVStation Premium
     (A Preview for a photo or a movie is created when you select the **PHOTO/MOVIE** menu in AVStation Premium Full Screen Mode and view the preview in the Library pane.)
  2. When the format of the photo or movie is not supported by AVStation premium.

Using Samsung Command Center

Samsung Command Center is a program that enables the easy management of software provided for a Samsung computer. You can view brief descriptions of some programs and you can launch the programs directly. Samsung Command Center is always hidden automatically and it appears when you place the mouse cursor in the right-most position.

Select **Start > All Programs > Samsung > Samsung Command Center > Samsung Command Center**.

The Samsung Command Center screen consists of the following 4 areas.



▶ **S/W Group Area** : You can classify programs into 5 groups, these being System, Utility, Network, Support, and Entertainment and manage them.

You can add a file that can be launched directly from the Desktop or Explorer (Files that have the extension of .cmd, .bat, .pif, .scf, .exe, .com, .lnk, or .scr) by dragging and dropping them.

▶ **S/W List Area** : Shows software included in the S/W group.
You can add a file that can be launched directly from the Desktop or Explorer by dragging and dropping it. Some Samsung software is automatically added or removed from the list when the software is installed or removed. If you move the cursor over the software in the list, you can view a brief description and the Run button to launch.

▶ **AV Station Area** : This only appears when the AV Station program has been installed.
You can easily launch the TV, music, movie or album player of the AV Station program. Drag and drop a media file from the Desktop or Explorer over any of the buttons to launch the corresponding player.

▶ **Samsung Update Plus Area** : When there is new software or a new driver, the Samsung Update Plus notification window appears.
If you click on the notification window, Samsung update Plus is launched and an update is performed with a percentage number indicating the progress status.

Chapter 4

Connecting to the Internet

This chapter provides instructions on connecting to the Internet.

Connecting to the Internet

The following options show many ways to connect to the Internet. An appropriate option should be selected depending on the user's working environment and the user's system specifications.

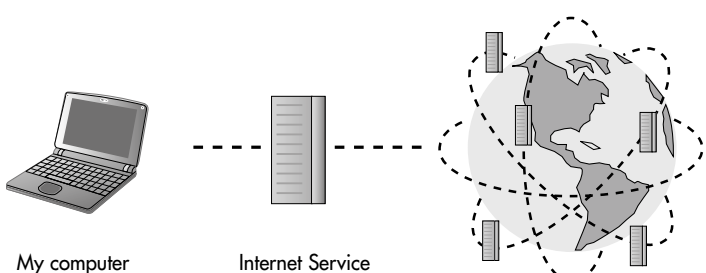
Option 1 Connecting using a modem and a telephone line.
Service has to be applied for and received from an Internet Service Provider (ISP) through an Internet service account.

Option 2 Connecting using a High-speed communication network service, such as ADSL and VDSL.
Service has to be applied for and received from a High-speed communication network service provider. Receiving Internet service may require support from specific devices. Contact the service provider for details.

Option 3 Connecting using a wired LAN
Use a LAN cable that is already installed in your office or building,

Option 4 Connecting using a wireless LAN
The Internet can be accessed without a telephone line or a LAN cable if there is a Wireless LAN AP (Access Point) nearby.

Note : The Wireless LAN function is optional.



Connecting to the Internet Using a Modem

1. Connect the telephone line to the modem port. Do not use a digital telephone line.

2. To connect the modem to the Internet, and use e-mail, you have to apply to an Internet Service Provider (ISP) for an Internet service.

Note

- For more account information, please contact your ISP.
- Ask your ISP about Internet fees and the disconnection procedure. If the Internet connection is not disconnected properly, additional telephone charges may incur.

Configuring the Network Environment Settings for Wired LAN Connections

A wired LAN environment is an environment where you can connect to the Internet using the company's LAN or with a broadband modem.

1. Connect the network (LAN) cable to the LAN port of the system.

2. Click **Start** > **Control Panel**.
3. Select **Network and Internet Connections** in the [Control Panel] window.
4. Click **Network Connections** in the [Network and Internet Connections] window.
5. In the [Network Connections] window, point the mouse pointer to Local Area Network and click the right touchpad button. Select **Properties** from the popup menu that appears.

6. In the General tab of the [Local Area Connection Properties] window, check that the connecting device field includes the **Broadcom BCM 5788 Integrated** driver.

7. In the "This connection uses the following items" field, select **Internet Protocol (TCP/IP)**, and click **Properties**.

Note In the above screen, necessary network components can be added by clicking the Install button.

8. Enter the system's IP and DNS server addresses on the General tab of the [Internet Protocol (TCP/IP) Properties] window. If DHCP is used, click "Obtain an IP address automatically" and "Obtain DNS server address automatically" on the General tab.

Note IP addresses and other information necessary for configuration can be obtained from the network administrator.

9. Once all of the information is entered in the [Internet Protocol (TCP/IP) Properties] window, click **OK** to finish.

Using Both DHCP and Static IP Simultaneously

When you are alternatively using networks with either DHCP or static IP addressing, you can use alternative settings that enable simultaneous configurations of DHCP and static IP to use both of the network connections without reconfiguring.

Note : This function is provided only when your operating system is Windows XP.

1. Click **Start > Control Panel > Network and Internet Connections > Network Connections > Local Area Connection**, press the right button of the touchpad, and then select Properties.
2. Select the **Internet Protocol (TCP/IP)** item, and then click **Properties**.
3. In the **Alternate Configuration** tab, click **User configured**, and then enter the appropriate values for the following:

   (IP address, Subnet mask, Default gateway, Preferred and alternate DNS server, Preferred and alternate WINS server)

4. When the configuration has been completed, click **OK**.
   Now you can connect to both networks using DHCP and static IP respectively.

Configuring the Network Environment Settings for Wireless LAN Network (WLAN)

A wireless network (Wireless LAN) environment is a network environment that enables communication between multiple computers at home or a small-size office through wireless LAN devices.

When a computer-to-computer network has been constructed, a computer that is not connected to the Internet can share the Internet by accessing another computer connected to the Internet.
(See P. '4-19. Sharing Internet Access')

Note

The description in this section refers to the Intel(R) PRO/Wireless 2200BG Network Connection (hereafter referred to as an 802.11BG card) and the Intel(R) PRO/Wireless 2915ABG Network Connection (hereafter referred to as an 802.11ABG card) device.

A wireless LAN card is optional. The model of the wireless LAN card is determined by the relevant product.

To view the installed wireless LAN card, click Start > Control Panel > Performance and Maintenance > System > Hardware tab > Device Manager.

The wireless LAN connection settings will be described on the basis of the Windows XP Service Pack 2 installed computer.

It is recommended using the default settings provided by Windows XP for the wireless LAN settings for Windows XP installed computers. To setup using the software supplied by the wireless LAN card manufacturer, refer to p.4-13 'Using a wireless Network with the Wireless LAN Setting Program'.

To use the wireless network, you have to turn on the wireless LAN function by using the Wireless LAN On/Off Button. (See P. 1-8)

Wireless network connections can be classified into two categories.

1) Access Point

You can connect to an AP to use the network. This is possible only in an environment equipped with an AP. (See P. 4-8, 'Connecting to an Access Point (AP)')

Note

What is an Access Point (AP)?

An AP is a network device that bridges wired and wireless LANs, and corresponds to a wireless hub in a wired network. You can connect multiple wireless LAN installed computers to an AP.

2) Computer–to-computer (ad hoc)

This is also called a peer-to-peer network.
In computer-to-computer wireless networks, you can wirelessly connect 2 or more computers that have wireless LAN modules. (See P. 4-9, 'Connecting to computer-to-computer networks (peer-to-peer or ad hoc)').

Connecting to an Access Point (AP)

This section describes how to connect to an AP. You can use the network when you are connected to an AP.

Note For more detailed information such as the network key (encryption key), ask your network administrator.

1. Right-click on the **Wireless Network Connection** ( ) icon on the taskbar, and select **View Available Wireless Networks**.

2. Select an AP (E.g. Test) to connect to and click **Connect**.
   If there is a configured network key for the AP to connect to, the Enter Network Key window appears.
   Enter the **Network Key** in the window and then click the **Connect** button.

Note

When a network key is not defined for a selected AP, click on Link to display the warning message box. Then click Connect again in the box.

Now when Connected in AP is displayed, and you can access the network.

Note **Checking the connection status.**
Move the mouse pointer over the **Wireless Network Connection** ( ) icon on the taskbar, and the connection status is displayed.

Connecting to computer-to-computer networks
(peer-to-peer or ad hoc)

In computer-to-computer wireless networks, you can wirelessly connect 2 or more computers that have wireless LAN modules.

Using this method, a computer that is not connected to the Internet can share the Internet by accessing another computer connected to the Internet.
(See P. 4-19. 'Sharing Internet Access')

You can connect by completing the following steps:

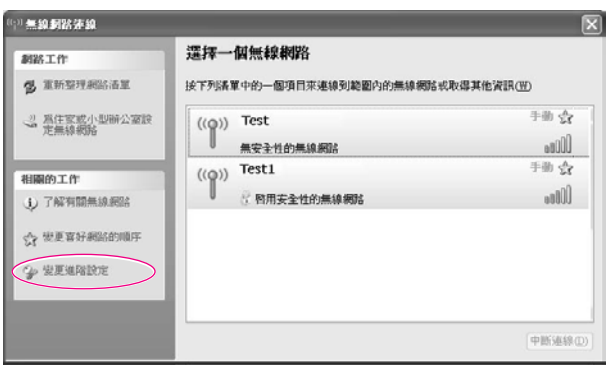
▶ Step 1. Set up a computer-to-computer network on a computer.

▶ Step 2. Connect to the configured computer from other computers.

■ Step 1. Setting up a computer-to-computer network

1. Right-click on the **Wireless Network Connection** ( ) icon on the taskbar, and select **View Available Wireless Networks**.

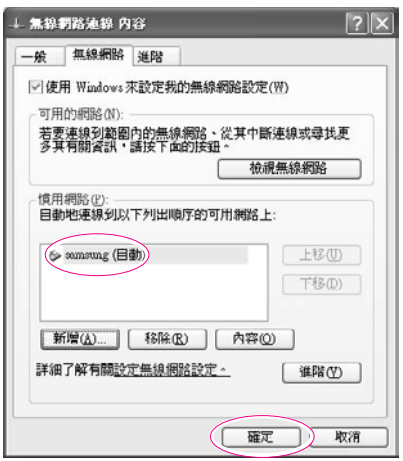
2. Click **Change the order of Preferred Networks.**



3. On the Wireless Networks tab, click **Advanced**.
4. Clear '**Automatically connect to non-default network**' check box, if it is selected.
   Select '**Computer-to-computer (ad hoc) networks only**', and click **Close**.
5. In the Wireless Networks tab, click **Add**.
6. Enter the network name (e.g. samsung), and unselect '**The key is provided for me automatically**'. Enter the encryption key in the Network key field, and click **OK**.

Note To prevent a network connection from an unauthorized user, it would be better to configure a network key (encryption key). A network key consists of 5 ~ 13 alphanumeric characters (e.g. magic), or of 10 ~ 26 hexadecimal numbers (a hexadecimal number is represented by numbers '0' to '9' or letters 'a' to 'f').

7. Check that the configured network name (e.g. samsung) is in the ‘Preferred networks item’, and click **OK**.

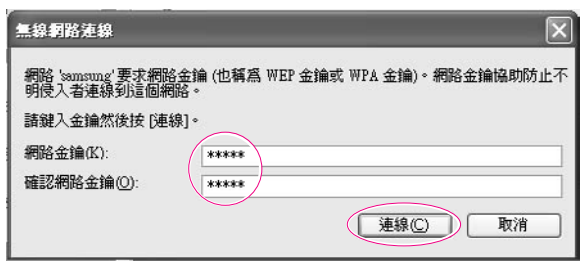


Now your wireless network setup has been completed.

■ Step 2. Connecting to the configured computer

1. Right-click on the **Wireless Network Connection** ( ) icon on the taskbar, and select **View Available Wireless Networks**.
2. Select the wireless network name (e.g. samsung) specified in “Connecting to computer-to-computer networks (peer-to-peer or ad hoc)”, and click **Connect**.

3. Enter a cryptographic key in the network key box and click Connect.

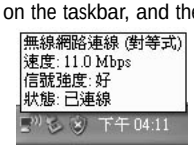


Note If the network key is not configured in “Connecting to computer-to-computer networks (peer-to-peer or ad hoc)” on P. 4-9, just click **Connect**, without any keystrokes.

When connected to the wireless network, the system displays **Connected** in the selected network of the Network Connection window.

Note **Checking the connection status.**

Move the mouse pointer over the **Wireless Network Connection** ( ) icon on the taskbar, and the connection status is displayed.



Wireless Network Setup Using the Wireless LAN SetupProgram

You can use a wireless LAN by using a wireless LAN configuration program (PROSet) provided separately.

To use wireless network connection, complete the following procedures.

- Step1. Install the wireless LAN configuration program (PROSet).
- Step2. Configure wireless network settings through the wireless LAN configuration program.

■ Step 1. Installing the wireless LAN configuration program (PROSet)

You can install the Wireless LAN Client Manager program by using the System Software Media. Insert the System Software Media into the CD-ROM drive and then install the Wireless LAN program.

■ Step 2. Using the wireless LAN configuration program (PROSet)

Double-click the **wireless LAN program** ( ) icon on the taskbar.
(Or, click **Start > All Programs > Intel PROSet Wireless > Intel PROSet Wireless**.)

Note In some languages, some buttons on the window may not be displayed. If this is the case, resize the window to use the program.

Configure wireless network settings in PROSet following the procedures below.

▶ To connect to an Access Point

To connect to an access point or existing computer-to-computer (Ad Hoc) network, refer to the following procedures. (To create a new computer-to-computer network, refer to the following P.4-15 **To create computer-to-computer (Ad Hoc) network** section.)

1. In Available Networks, click on **Refresh**.
2. Select the name of desired access point or computer-to-computer network to connect from the searched available networks list, and click **Configure**.

Note

If your desired network does not appear, click **Refresh**.

An access point is represented by the ( ) icon, and a computer-to-computer network is represented by the ( ) icon. An ( ) icon is displayed in front of an access point or a computer-to-computer network with configured security settings.

3. Enter **Profile Name** and click **Next**.
4. In the Search Security Settings window, the wireless network security search message will appear. Click **Next.**
5. Enter the **network authentication, data encryption (WEP), encryption level, key index**, and **wireless security password** configured for the target access point or computer-to-computer network in the Security Settings window, and click Next.

Note

The network authentication, data encryption (WEP), key index, and password of a access point are configured in the access point management program. For information on the security information, check the security settings of the access point or ask your wireless network administrator.

To connect to an existing computer-to-computer (Ad Hoc) network, enter the password configured when creating the computer-to-computer network for the first time. You do not need to enter network authentication or key index.

Security Settings

- **Network authentication** : The network authentication option includes Open System and Shared Key. When you select Open System, no authentication is applied (however, encryption is supported). When you select Shared Key, a WEP key is used for authentication. The default setting is Open System
- **Data encryption (WEP)** : The IEEE 802.11 WEP (Wired Equivalent Privacy) standard defines two levels of encryption, a 64-bit key (this is sometimes represented by 40bits) and a 128-bit key.
- **Key index** : Select the current encryption key index used by the access point out of 1 to 4.
- **To use encryption key** : Click **Use pass phrase** to activate, and enter 5 (for 64-bit) ~ 13 (for 128-bit) alphanumeric characters (represented by 0-9, a-z, or A-Z).

6. The Done window appears, click **OK**.

   When a wireless connection to an access point is established, connection icon ( ) appears in front of the name of connected profile.

To create a computer-to-computer (Ad Hoc) network

To create a new computer-to-computer (Ad Hoc) network or to connect to a hidden access point (Stealth/Closed Mode), refer to the following procedures.

Note A hidden access point is an access point that exists, but is configured not to be detected by the scan operation to prevent access attempts from unauthorized users.

1. In Profiles, click on **Add**.
2. Enter **Profile Name** and **Network name (SSID)**, select **Operating Mode**, then click **Next**.

Note

What is a network name (SSID)?
Network name (SSID) is a name that a wireless adapter uses for identifying connection. Enter the name of computer-to-computer network to create (e.g., samsung) or the name of access point to connect. The network name identifies cases. (capital and lowercase) For the name of access point, check the settings of the access point, or ask your wireless network administrator.

Operating Mode:

Network (Infrastructure) - Connect to an Access Point : Select to connect to an access point.

Device to device (Ad hoc) - Connect directly to other computers : Select to create a computer-to-computer (Ad Hoc) network.

3. Configure password setting to be used for computer-to-computer network connection in the Security Settings window.
   To connect to an access point, enter the **network authentication, data encryption (WEP), encryption level, key index**, and **wireless security password** configured in the access point.

Note It is recommended to configure data encryption for security purposes when creating a computer-to-computer network connection profile. For more information on security settings refer to the security settings in Connecting to AP or Help.

When you are creating a computer-to-computer network connection profile, the network authentication setting is disabled.

4. When a profile creation is completed, the new created profile appears in the profiles list. Select corresponding profile, and click Connect to connect to the created profile.

   When a wireless connection to the created profile is established, the connection icon ( ) appears in front of the name of the connected profile.

Using Samsung Network Manager

Samsung Network Manager is a program that has been developed to enable users to use the network easily.

Samsung Network Manager provides the following features.

- **You can easily set up the network and printer settings.**
- **You can immediately use the network without defining new network settings again after moving locations.**
  By setting the network settings (IP address, printer settings, etc.) for each location, you can immediately access the network without following network setting procedures each time regardless of your location.
- **You can easily share Internet Access.**
  You can share your Internet connection by setting up a computer with 2 LAN interfaces (wired and wireless, or 2 wired LAN) as the sharing server. Then, you can access the Internet on a sharing client by connecting to the sharing server.
- **You can diagnose the network status.**
  You can diagnose the network status when the network is not properly connected.

■ Using the Network

This section describes the procedures to connect to the Internet by setting up a network. The setting up procedures include the procedures to add a printer to the network.

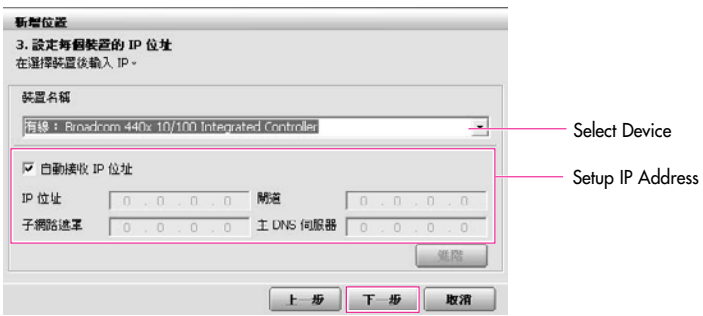
Note The setting up procedures are different for wired and wireless LAN connections.
To use a wireless LAN, there should be a wireless LAN AP available nearby.

▶ Setting Up a Network

1. To use a wired LAN, connect the **LAN cable** to the **LAN port**.
   To use a wireless LAN, press the <**Fn**> and <**F8**> key combination simultaneously to enable a wireless LAN. When the wireless LAN is enabled, the **Wireless LAN Operation LED** ( ) lights up.
2. Run **Samsung Network Manager**.
   Select **Start > All Programs > Samsung > Samsung Network Manager > Samsung Network Manager** or double click the **Samsung Network Manager** ( ) icon on the Desktop.
3. Click the **Add** button.
4. Select a network location icon and enter the name of the location (e.g. Home). Click the **Next** button.

5. Select **Internet direct connection** and click the **Next** button.

6. Select the LAN device, setup the IP address and click the **Next** button.



Note

Select Device

Select a device to be connected to the Internet. Select either Wired LAN or Wireless LAN.

Setting up the IP Address

To allocate an IP address automatically (DHCP), select **Get IP Automatically**. To use a static IP address, unselect **Get IP Automatically** and enter an IP address. For IP address information, ask your network administrator.

7. When the Printer Setting window appears, click **Finish**.

   To add a printer, click **Add Printer**. The Add Printer Wizard appears. Set up the printer according to the instructions displayed on the screen.

   When the printer has been added, click the **Show printer** button, select the newly added printer and then click the **Finish** button.

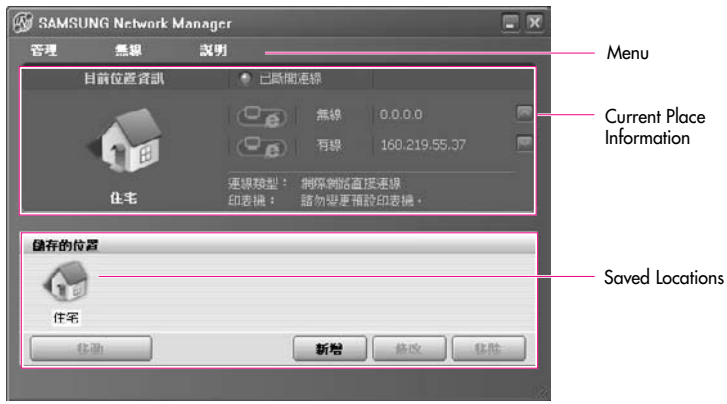
Note

To not add a printer, select **No Default Printer** and then click the **Finish** button.

When the network setting is complete, the '**Do you want to move to newly added location now?**' message appears. If you select '**Yes**', the network settings for the added location are applied.

When the network settings for the added location are applied, the added place and the corresponding network connection information is displayed in **The detailed Information for window**.

When the network setting is complete, an icon for the added location is created within the Saved Locations window. Now you can use the Internet or add a new network location.



Note

Wireless LAN AP Connection Procedures

To use a wireless LAN, first connect to a wireless LAN AP and then you can access the network even when moving location. Or moving location and then you can access the network even when connecting to a wireless LAN AP.

1. Right-click over the **Wireless Network Connection** ( ) icon on the Taskbar and click **View Available Wireless Networks**.
2. Select an available wireless network (e.g. SAMSUNG) and click the **Connect** button. For information on available wireless LAN APs, ask your network administrator.

3. The network key (security key) input window appears.
- If a network key has been set for the wireless LAN AP, enter the network key and click the **Connect** button. For the network key information, ask your network administrator.
- If no network key has been set for the wireless LAN AP, click the **Connect** button without entering the network key.

4. When the computer is connected to the wireless LAN AP, the **Connected** message will appear on the Wireless Network icon in the Taskbar.

▶ Using the network after moving location

By setting the network settings (IP address, printer setting, etc.) for each location, you can immediately access the network without performing the network setting procedures regardless of your location.

1. Run **Samsung Network Manager** when connected to the Internet.
2. Select an icon that represents the corresponding location from the Saved Locations window and then click **Move**.
3. When the network settings of the selected location are applied, the new location and the network connection information are displayed in the **The detailed Information for window**.

■ Sharing Internet Access

This section describes the procedures to share Internet Access.

To share Internet Access, you first have to define a sharing server and a sharing client. When the setup is complete, you can access the Internet from the sharing client by connecting to the sharing server.

Note

Sharing Server : A computer with 2 LAN interfaces that provide a function to share Internet Access.

Sharing Client : A computer that uses the Internet by connecting to a sharing server without itself having a direct connection to the Internet.

You can connect a sharing server and a sharing client as follows. (See Figure 5 on page 4-17.)

	Sharing Server		Sharing Client
	External Internet Device	Client Device	
Connection 1	Wired LAN	Wireless LAN	Connect a sharing client with the device that is the same as the client device of the sharing server.
Connection 2	Wireless LAN	Wired LAN	
Connection 3	Wired LAN	Wired LAN	

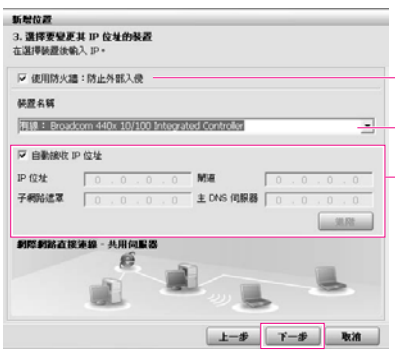
To connect a sharing server and a sharing client using a wired LAN, connect the computers with a LAN cable first.

To connect through a wireless LAN, press the **<Fn>** and **<F8>** key combination simultaneously to enable the wireless LAN. When the wireless LAN is enabled, the **Wireless LAN Operation LED** ( ) lights up.

As an example, Internet sharing procedures for **[Connection 1]**, which connect the sharing server and the Internet through a wired LAN and connect the sharing server and the sharing client through a wireless LAN, are described below.

▶ Setting Up a Sharing Server

1. Run **Samsung Network Manager** on the computer to be used as the sharing server.
2. Click the **Add** button.
3. Select a network location icon and enter the name of the location (e.g. Home). Click the **Next** button.
4. Select **Internet direct Connection for sharing** and click the **Next** button.
5. Set up the network device to be connected to the external Internet. Determine whether to use a firewall and select a network device to be connected to the external Internet (e.g. Wired LAN). Set the IP address and then click the **Next** button.



Note

· To protect against external intrusion attempts, using a firewall is recommended.
· For more information on selecting a device and setting the IP address, refer to the description of item 6 of Setting Up a Network on page 4-16.

6. Select a network device to connect to the sharing client (e.g. wireless LAN) and click the **Next** button.

Note

To Share Internet Access through a Wireless LAN

· In the Select Device field, **select Wireless**.
· In the **Wireless Connection Name** (e.g. Samsung) field, enter the network name.
· To use the network key (security key), select the '**Use Network Key,,**,' option and enter a network key. Remember the network key because you have to re-enter the key on the sharing client to connect to the sharing server.

7. The setup information is displayed. Confirm the settings and click the **Next** button.
8. When the Printer Setting window appears, click **Finish**.

   For the printer setup procedures, refer to **Setting Up a Network** on page 4-17.

When the Shared Server setting is completed, set up the shared client.

▶ Setting Up the Sharing Client

1. Run **Samsung Network Manager** on the computer to be used as a sharing client.
2. Click the **Add** button.
3. Select a network location icon and enter the name of the location. Click the **Next** button.
4. Select **Internet Sharing** and click the **Next** button.

Note

· To connect through a wireless LAN, select **Internet Sharing - Wireless**.
· To connect through a wired LAN, select **Internet Sharing - Wired**.

5. Confirm the network device to be connected to the server and click the **Next** button.

Note

· To connect through a wireless LAN, enter the **wireless connection name** (e.g. Samsung) you entered in the sharing server. If you have set a network key (security key) for the sharing server, enter the network key.

6. The setup information appears. Confirm the information and click the **Next** button.
7. When the Printer Setting window appears, click **Finish**.

   For the printer setup procedures, refer to **Setting Up a Network** on page 4-17.

When the settings are completed, you can use the Internet on the shared client.

Note

· To access the Internet from the sharing client, the sharing server has to be on.
· To use the Internet on the sharing client, select a sharing client icon from the **Location List** window and then click the **Move** button.
· If the connection is broken while using the Internet on the sharing client, click the **Ap Active** from the **Wireless** menu to reestablish the connection.

■ Network Status Diagnosis

You can diagnose the network status when the network is not properly connected.

1. Run **Samsung Network Manager**.
2. Select **Diagnose Status** from the **Manage** menu.
3. The Network Connections figure window appears. Click the **Start** button to start the network diagnosis.
4. When the diagnosis is complete, out of order devices are marked by the exclamation mark icon. For detailed device status, read the description in the lower part of the window.

Using Network Services

While the computer is connected to the network, you can use network services to share files, folders, and printers.

Note Network services are provided for the computers that are connected to the network through wired or wireless network connections. (See Pages 4-3, 4-7, **Configuring Network Environment Settings**)

Sharing files or folders

This section describes how to share files and folders between computers connected to the network.

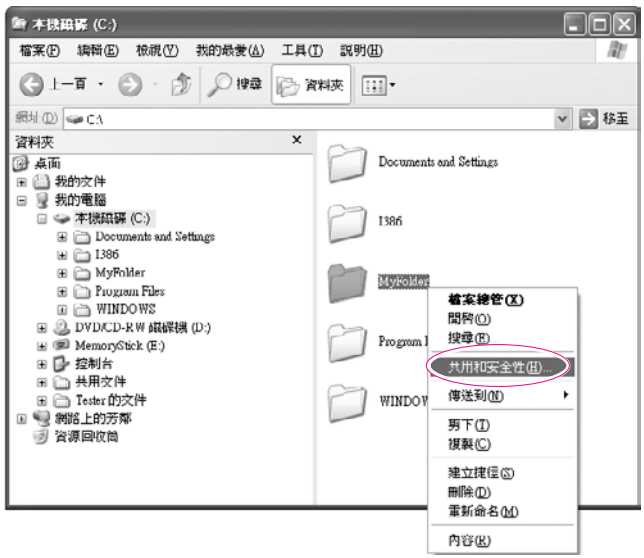
To share files, complete the following procedures:

- ▶ Step 1. Configuring the sharing of files and folders on a computer.
- ▶ Step 2. Accessing shared files and folders from another computer.

Caution When a file or folder is shared, anyone connected to the network can open and delete the shared file or folder.
Configure a file sharing network only when the network is secure, and do not share important data.

Step 1. Configuring Sharing

1. Right-click the target file or folder to share in **My Computer**, and select **Sharing and Security**.



2. Click '**IF you understand the security risks but want to share files without running the wizard, click here**'.

Note It has the same security effect as that of the '**Network Setup Wizard**'. This screen does not appear if Internet Sharing Network Wizard has been installed in the computer-to-computer wireless network environment.

3. Select '**Just enable file sharing**', and click **OK**.
4. In the 'Network sharing and security' field, select '**Share this folder on the network**', enter the share name, and click **OK**.

Caution Be cautious when selecting 'Allow network users to change my files' since other network users can change the files in the shared folder.

The file and folder sharing configuration has been completed.

Step 2. Using Shared Files or Folders

This section describes how to access shared files or folders if your computer is a member of the same workgroup.

1. Click **Start > My Computer**. Under **Other Places**, click **My Network Places** in your computer.
2. Click '**View workgroup computers**', and click the desired computer to access the shared file.

Note **If your computer is a member of another workgroup:**

1. Click **Other Places > Microsoft Windows Network**.
2. Click the desired workgroup.
3. Click the desired computer to display the shared files or folders.

Sharing Printers

This section describes how to share a printer between computers connected to a network.

To share a printer, complete the following procedures:

- ▶ Step 1. Configure printer sharing in the computer connected to the printer.
- ▶ Step 2. Add and use the shared printer in other computers on the network.

■ Step 1. Configuring Printer Sharing

1. From the computer connected to the printer, click **Start > Printers and Faxes**.
2. Right-click the printer you want to share, and click **Sharing**.

3. Select '**Share this printer**', enter a share name for the shared printer, and click **OK**.

4. In the Printers and Faxes window, you will find the printer icon has been changed to another icon on a hand.

Step 2. Adding and Using a Shared Printer

1. From a different computer that wants to use the shared printer, click **Start > Printers and Faxes**.
2. Click **Add a printer**.
3. In the **Add Printer Wizard**, click **Next**.
4. Select '**A network printer, or a printer attached to another computer**', and click **Next**.
5. Select '**Browse for a printer**', and click **Next**.
6. Select the workgroup or computer, select the desired printer, and click **Next**.

If you cannot find the desired printer, try again after a while.

7. Read the warning about a shared printer, and click **Yes** to install the shared printer.
8. Select **Yes** for 'Do you want to use this printer as a default printer?', and click **Next**.
9. Click **Finish**.
10. When the printer sharing configuration has been completed, the shared printer appears in the Printers and Faxes window.

Now you can print using the shared printer even if your computer is not directly connected to a printer.

Using Bluetooth Devices (Optional)

You can transfer files between Bluetooth devices, use the Internet, and construct a Personal Area Network. In addition, you can use a wireless keyboard, wireless mouse, and a wireless printer that have the Bluetooth function.

Note

You can only use the Bluetooth communication function between devices (computers, mobile phones, PDAs, printers, etc.) which support Bluetooth.

Bluetooth Device On-line Help

For more detailed procedures on using the Bluetooth function, click **Start > Help and Support > Network and the Web > Networking > Wireless networking > Bluetooth devices,** and view the descriptions.

■ The following functions are provided by the Bluetooth software.

▶ Transferring files

You can transfer files between Bluetooth devices such as computers, mobile phones, PDAs (Personal Digital Assistant), etc.
For more detailed procedures on transferring files, refer to "**Send and Receive files to/from a Bluetooth device**" of the Bluetooth On-line help.

▶ Using the Internet via a mobile phone

You can connect to the Internet through your mobile phone after connecting it to a computer which is connected to the Internet.
For more detailed procedures on using the Internet, refer to "**Install a Bluetooth mobile phone**" and "**Create a Bluetooth connection to the Internet using a Bluetooth mobile phone**" of the Bluetooth On-line help.

▶ Using a wireless keyboard and mouse

You can use a wireless keyboard and mouse which have the Bluetooth function.
For more detailed procedures on using a wireless keyboard and mouse, refer to "**Install a Bluetooth keyboard**" and "**Install a Bluetooth mouse**" of the Bluetooth On-line help.

▶ Using a wireless printer

You can use a wireless printer if the printer supports Bluetooth HCRP (Hardcopy Cable Replacement Profile).
For more detailed procedures on using a wireless printer, refer to "**Install a Bluetooth printer**" of the Bluetooth On-line help.

- **Using a Personal Area Network**
  You can exchange files between computers by connecting to the shared folder of another computer via a Personal Area Network.
  For more detailed procedures on using the Personal Area Network, refer to "**Join a personal area network**", "**Provide a name for your computer on a personal area network**" and "**Bluetooth personal area networking overview**" of the Bluetooth On-line help.

- **Sharing data with a Palm Hand-held PC or a Pocket PC**
  You can transfer data to and from a Palm Hand-held PC or Pocket PC.
  For more detailed procedures on sharing data, refer to "**Installing a Palm handheld computer using Bluetooth technology**" and "**Installing a Pocket PC using Bluetooth technology**" of the Bluetooth On-line help.

■ Precautions

- Please do not send files larger than 60MB when transferring files through a File Transfer Function or Personal Area Network. Sending a file larger than 60MB may fail due to an unstable Bluetooth connection.

- When using the Personal Area Network function, other computers may not appear in My Network Places. If you cannot see other computers after 5 minutes, click "**Start > Search > Computers or people**" and enter the name of a computer and search for it.
  For procedures to view the name of your computer, refer to "**Provide a name for your computer on a personal area network**" of the Bluetooth On-line help.

Chapter 5

System Management

This chapter provides information on efficient computer management.

Managing Power

Use Power Options to save power consumption. You can switch Standby Mode while you are not using your computer or configure the system components to shut it down on a specified time.

Specifying Power Save Time

You can specify Turn Off Monitor, Turn Off Hard Disk, System Standby Mode, and Maximum Power Save Mode.

Select **Start** > **Control Panel** > **Performance and Maintenance** > **Power Options** > **Power** Schemes tab. Then specify time in each item and click OK.

Note

The Power Setting is set to BatteryMgr-Normal Mode. BatteryMgr-Normal Mode extends the battery use time when using battery power, and optimizes the Intel Speedstep feature. Since it automically optimizes the processing speed of the system to minimize power consumption, you may experience slower operations when using battery power than when using AC power. To use BatteryMgr-Normal mode in the Windows system, please install the Battery Manager program by using the System Software Media.

Monitor Off
The LCD display goes into Power-Saving mode after the specified period of time.

Hard Disk Off
The Hard Disk goes into Power-Saving mode after the specified period of time.

Standby Mode
If the computer is not used for the specified period of time, the monitor and hard disk drives are turned off to reduce power consumption.

Hibernation Mode
Saves the current working status onto the hard disk and turns the computer off. Pressing the Power button restores the computer to the previous working status.

Note

Press Power button to use computer again in Standby Mode or Hibernation Mode.

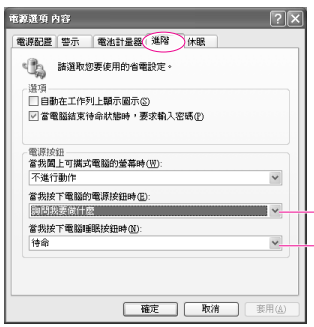
You can also reserve Turning Computer Off, Maximum Power Saving Mode, Hold Mode, etc. by selecting System > Computer Scheduling in the EasyBox program. (See P. 3-12.)

If you change the power settings in the Battery Manager program, the settings of the 'Power Options Properties' window are automatically changed accordingly (see P. 5-6).

Using the Power button

You can configure the function of the power button.

Click **Start** > **Control Panel** > **Performance and Maintenance** > **Power Options** and select the Advanced tab.



Configure the Power button function.

Configuring the function of the <fn>+< > key combination.

Caution When the Power button is configured to put the system into Power-Saving Mode, manually shutting down the computer requires the Power button to be pressed and held for more than 4 seconds.

Using the Battery

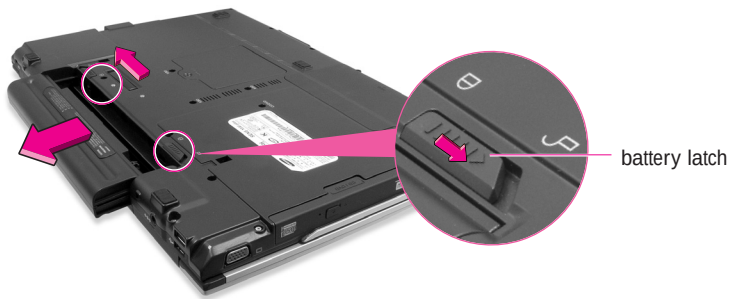
Please refer to the following instructions when running the computer on battery power without connecting the AC power.
This computer uses smart rechargeable Lithium-Ion (Li-Ion) battery.

Caution

- Please read the instructions on the battery before use.
- Please refer to the system operation environment (Page A-2) of this manual and operate and store the battery at room temperature.

Ejecting and Attaching Battery

1. Shutdown system and close LCD.
2. Put the computer upside down.
3. Pull the two battery latches outward( ), then remove the battery.



4. To install the battery again, slide the battery into the system as below. The battery latch moves inward, and fixes the battery automatically.

Monitoring the Battery Charge

You can view the battery charge status by completing the following procedures.

■ Using the shortcut key to view

Press the <fn> + <F2> key combination on the keyboard and then the current power source and the current remaining battery charge are displayed at the top left of the screen.

■ To view on the battery

Click the PUSH button on the battery. The remaining battery charge (%) will be displayed.

■ To view through the Control Panel

Select Start > Control Panel > Performance and Maintenance > Power Option > Power Measure tab.

Then you can view the current power source and the current remaining battery charge.

Caution **Using the battery**

Battery is an expendable supply, so when you use it for a long time, the capacity/battery life is shortened. If the battery life time is reduced to under half of the initial time, we recommend that you purchase a new battery to use.

Note **Battery Warning**

You will hear an alarm when the remaining battery charge is under 10%. Connect the power cable or turn off the computer and install a fully charged battery. When the remaining battery charge is under 3%, the computer automatically saves current work and turns off. This may be different according to the settings in **Control Panel > Performance and Maintenance > Power Options > Alarms** tab.

Extending the battery use time

Decreasing the LCD Brightness

Decreasing the LCD brightness by pressing the <Fn>+<[F3]> key combination on the keyboard or adjusting the brightness in the Battery Manager program extends the battery use time.
Decreasing the LCD brightness by one level extends the battery use time by 3~5% (10~20 minutes). (The battery use time is determined by the corresponding model.)

Using the Battery Manager

Battery Manager is a power management program that enables using battery power efficiently.
You can easily change the power mode by selecting an optimized power mode and manually optimizing the battery use time by setting each option.

Click on Start > All Programs > Samsung > Samsung Battery Manager > Samsung Battery Manager

▶ **Maximum Battery Saving Mode :** This mode is appropriate for conditions which require the maximum battery use time. This may degrade the performance of the system.

▶ **Normal Mode :** This mode is appropriate for normal conditions. Both system performance and battery use time are optimized.

▶ **Maximum Performance Mode :** This mode is appropriate for conditions that require maximum system performance.
Therefore, the battery usage time may be reduced in this mode.

▶ **Custom Mode :** In this mode, a user can configure a detailed configuration to save the battery usagetime.
You can adjust the LCD brightness, the system standby time, the screen color quality, and the graphic mode values.

Note

Power Saving Effect

This shows the relative battery use time for each power mode. The more effective the power saving, the longer the graph will appear.

When Running a Game or Multimedia Application

A game or multimedia application may not work smoothly in Maximum Battery Saving Mode.Using this is recommended when the AC adapter is connected or in Normal or higher modes.

■ Turning Off Unnecessary Devices Turning off

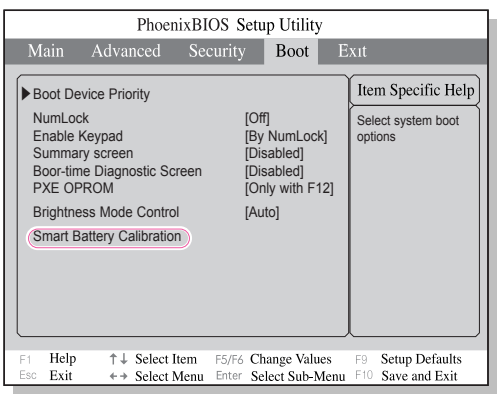
Turning off unnecessary devices extends the battery use time.

Select the **Start > Control Panel > Performance and Maintenance > System > Hardware** tab and click **Device Manager**. Right-click a device you are not using, and select 'Disable' (e.g. Wireless LAN, IEEE 1394, etc.)

■ Use Battery Calibration

If you charge/discharge the battery repeatedly for only a short time, the battery use time may be reduced by the difference between the actual battery charge and the remaining charge display. In this case, the actual battery charge and the remaining charge display will be same by discharging the battery completely using the Battery Calibration function, and then recharging it again.

1. Turn off the computer and disconnect the AC power.
2. Turn on the computer and press <F2> to enter into System Setup.
3. Select **Smart Battery Calibration** in the **Boot** Menu, and press <Enter> to start.
   The Battery Calibration function is activated and the battery is discharged forcibly. This operation requires 3~5 hours depending on the battery capacity and the remaining battery charge.



4. When the calibration process is complete and the battery is completely discharged, connect the AC power adaptor to fully recharge the battery.

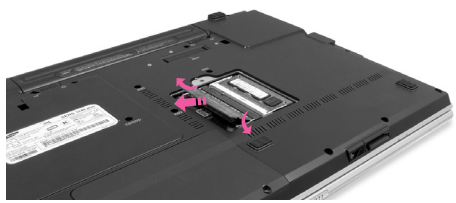
Upgrading Memory

This computer has one or more 256 MB or 512 MB memory module(s). Two memory module sockets are provided so that you can replace memory or install an additional memory module.

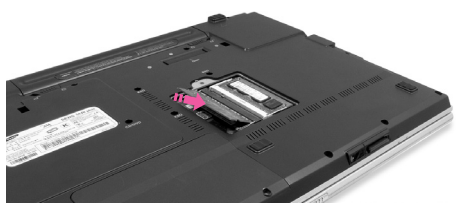
Note Before replacing the memory module, turn the system off completely and remove the battery. Do not replace the memory module when the system is in Rest Mode.

1. Using a screwdriver, open the memory-module compartment cover on the bottom of the system.

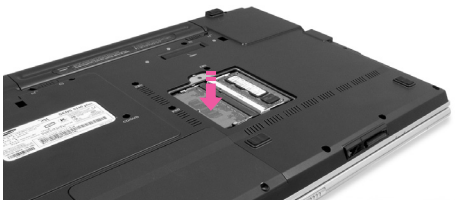
2. Push the memory module tabs outward to pop the memory module outward. Pull the module out at an angle of about 30°.



3. Align the new memory module connectors accordingly and slide it into the slot at a 30˚ angle.



4. Push the memory module in until the module clicks into place. If the memory module is not fixed completely, push the module while pressing the memory module tabs outward.



5. Close and fix the memory-module compartment cover using a screwdriver.

Using the Security Lock

The security lock is a device used to physically 'fix' the system when using it in a public place. The locking device needs to be purchased separately. The shape and methods of use may differ depending on the manufacturer. Please refer to the manual provided with the security lock for proper use.

Fix the Kensington lock cable to a fixed object (①) and connect the cable to the Anti-theft port at the rear of the system (②).

Traveling with the Computer

- When traveling, keep the system and the AC adapter disconnected. Otherwise, it may affect the functions of the system.

- Make sure that the system is not pressed by a book or heavy objects. The LCD may get damaged.

- When traveling by plane, use a bag designed for notebook PCs and hand-carry the computer.

- Allow the computer and disks to pass through security X-rays but do not pass the computer and disks through metal detectors.

- Do not use the computer during take off and landing.

- Make sure the eject button of PCMCIA card slot is locked.

Chapter 6

Customizing your computer

This chapter provides information how to use the system setup, customizinig screen settings.

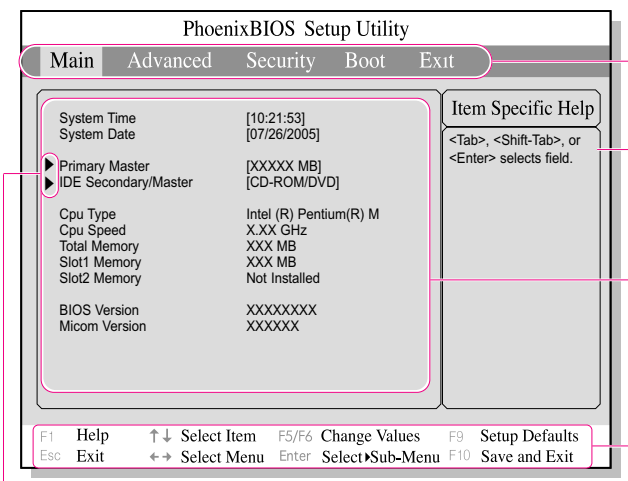
Using System Setup

System Setup is a utility that enables the computer environment to be changed to suit the user. System Setup is used when changing the system password, booting priority, or when adding new devices.
Please use extra care when configuring System Setup, as it may cause serious system error.

To enter System Setup

1. Turn on the computer.
2. When the booting screen appears, press <F2>.

3. The initial System Setup screen will appear in a moment.



Setup Menu

Help
Displays help information on the current selected item.

Setup Item

Navigation Keys
Use these navigation keys to view and change the System Setup settings.

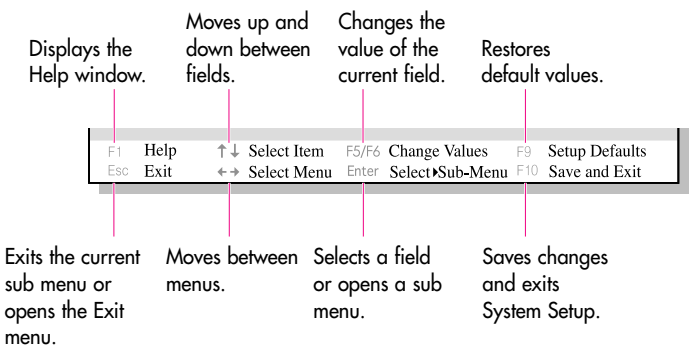
Sub-Menu
Press<enter> to display sub-menu.

System Setup Menus

Menu Items	Description
Main	Configures the basic system environment
Advanced	Configures OS and major chipset options of the system
Security	Configures system security options
Boot	Configures booting options
Exit	Exits System Setup

Note For more information on System Setup menus or options, please refer to Help on the right side of the screen.

System Setup Navigation Keys


Displays the Help window.
Moves up and down between fields.
Changes the value of the current field.
Restores default values.
F1 Help
Esc Exit
↑↓ Select Item
←→ Select Menu
F5/F6 Change Values
Enter Select▸Sub-Menu
F9 Setup Defaults
F10 Save and Exit
Exits the current sub menu or opens the Exit menu.
Moves between menus.
Selects a field or opens a sub menu.
Saves changes and exits System Setup.

Note Contents of System Setup may be changed due to functional improvement or other reasons.

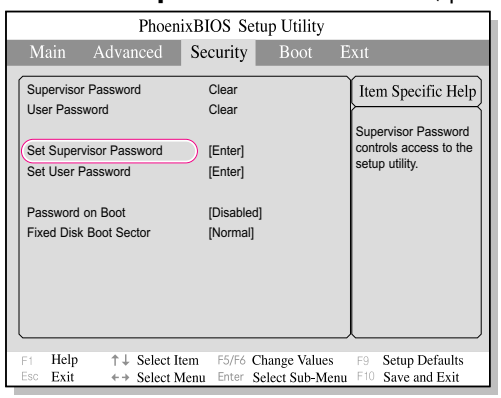
Configuring the Password

Setting the Supervisor Password

By configuring a supervisor password, you can restrict system access to authorized users only.

Note : Do not lose or forget your password. If you have forgotten your password, contact the Samsung service center.

1. Select the **Security** menu in the System Setup. (To enter into System Setup, see Page 6-2.)
2. On the '**Set Supervisor Password**' item, press <Enter>.



3. Enter a password, press <Enter>, re-enter the password for confirmation, and press <Enter> again.

4. When a message confirming the password configuration appears in the [Setup Notice] window, press <Enter>.

Setting the User Password

You can configure user passwords so that other users can use the system.

Note

- Before configuring a user password, a supervisor password must have been configured.
- Users can start the system with their user password, but cannot enter into the System Setup.
- Deactivating the supervisor password also deactivates the user password.

On the 'Set User Password' item, press <Enter>, and complete step 3-4 of Configuring the Supervisor Password.

Activating the Booting Password

Note

- Before activating the booting password, the supervisor password must have been configured.

Set the 'Password on boot' option to [Enabled].
From now on, you must enter the password to boot the system.

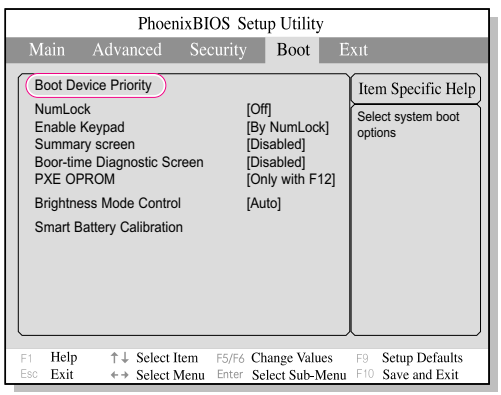
Deactivating the Password

1. On the password to delete, press <Enter>. (e.g. supervisor password)
2. Enter the current configured password, and press <Enter>.
3. Leave the 'New Password' and 'Confirm New Password' field empty, and press <Enter> to deactivate the password.

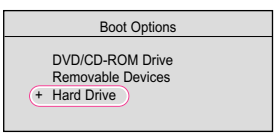
Changing Booting Priority

You can select the booting priority among the devices such as the hard drive, CD-ROM drive, etc. The following example describes how to configure the hard drive as the first booting device when the CD-ROM drive is configured as the first booting device by default.

1. Select the Boot Menu in System Setup.
2. Press <Enter> on **Boot Device Priority** item.



3. Use the < ↓ > key to move to the **Hard Drive** item, and press <F6> key until it is at the very top.



4. Press <F10> to save the changed configuration, and exit System Setup.
   Now you can boot the system with the hard disk drive as the first booting device.

Configuring Resolution and Color Depth

Screen resolution is the number of pixels displayed on the screen. High resolution makes the overall screen area large, although individual items appear small. Color quality is determined by the number of bits used to represent a pixel on the screen. High color quality displays more number of colors on your screen.

1. Select **Start > Control Panel > Appearance and Themes > Change the screen resolution**.
2. Make changes on the **Settings** tab of the [Display Properties] dialog.

You can view the graphics chipset.

To change the number of colors displayed on a monitor, select an appropriate color quality.

To change your screen resolution, move the slider to select an appropriate resolution.

Note Graphics Chipset Information

You can view the installed graphics chipset in the Display Properties window.

- NVIDIA Geforce Go 6600 (NV43M)

3. When you have completed configuration, click **Apply**.

Note

The following resolution and color quality settings are recommended depending on the LCD screen of the system.

WXGA+ (17"): Screen resolution: 1440 x 900, Color quality: Very high (32bit)

WSXGA+(17"): Screen resolution: 1680 x 1050, Color quality: Very high (32bit)

Using External Display Devices

Using external display devices such as a monitor, projector, TV, etc allows you to view screen images alternatively or simultaneously on each device. Additionally, you can extend the screen onto two display devices to use a larger workspace.Using external display devices is especially useful when you are giving a presentation or watching a movie through your TV.

■ Switching Display Devices Using the Shortcut Key

You can watch the screen through either the LCD or an external display device, or you can even watch the screen through both the LCD and an external display device simultaneously.

1. Connect the external display device (e.g. a monitor or a projector) to the corresponding port of the system.
   To connect a TV, connect the TV to the TV output port of the system.

Note

Connecting to a TV
To connect to a TV, connect the TV-Out port of the system and the S-Video port of the TV with the S-Video cable. (The cable is not included and needs to be purchased additionally.)

2. Press the <**Fn**> + < > key. Provided that an external display device is connected, the display option changes in LCD > CRT > LCD+CRT order whenever the key is pressed.

Note

When multiple display devices are connected, pressing the <Fn> + < > keys displays a picture on the LCD > CRT > TV > DVI > LCD+CRT > LCD+TV > LCD+DVI > LCD, in this order.

In the MS-DOS environment, the picture is displayed to the LCD > CRT, in turns, and output to a TV/DVI is not supported. In full screen MS-DOS mode of Windows, you cannot change the display device by pressing the shortcut key.

■ Using Dual View to View an Extended Screen

You can expand the screen into two display devices and work conveniently in separate workspaces.
In Dual View mode, you can select the screen resolution and color quality for each display device, as if there were two separate graphics cards.

1. Connect the external display device (e.g. a monitor or a projector) to the corresponding port of the system.
   To connect a TV, connect the TV to the TV output port of the system.
   ('See P. 6-8 Connecting to a TV')
2. Press touchpad right button on the desktop, click **Properties**, and then click the **Settings** tab.
3. Click the **monitor** '**2**' icon, select the '**Extend my Windows desktop onto this monitor**' check box, and then click **Apply**.

4. When you have completed this, click **OK** on the left of the Troubleshoot button. The primary display device (the LCD) is indicated as '1', and the secondary display device is indicated as '2'. Now you can use each of the two display devices as independent display devices.<Enter> to deactivate the password.

1: Primary

2: Secondary

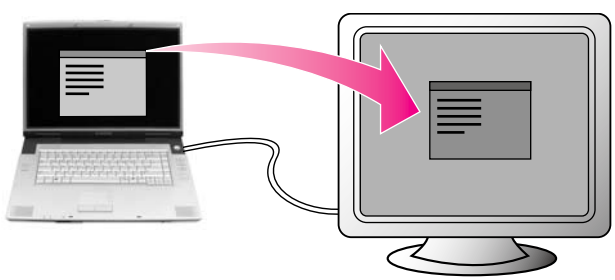
Note When you use Dual View, configuring the LCD as the '**Primary**' monitor is recommended.

Caution If the screen of the secondary display device is displayed at 640x480 pixels, with 256 colors, change the settings to the desired screen resolution and color quality in the [**Display Properties**] window.

■ Deactivating Dual View Mode

Click the **monitor** '**2**' icon, clear the '**Extend my Windows desktop onto this monitor**' check box, and then click **Apply**.

Note **To move a window between display devices in Dual View mode**
Click the title bar of the window in the primary display device (1, the LCD), and drag it to the secondary display device (2). The window moves to the secondary display device.



Checking for Viruses

The Norton AntiVirus software is provided as the virus inspection program.

Note

When you first run Norton AntiVirus, the Norton AntiVirus Configuration window pops up. If you complete the configuration and your computer connect to network, you can download and install the latest updates via the network. When the live update is done, virus scanning starts automatically. To stop scanning, click on Stop.

If you didn't configure the Norton AntiVirus program, a security alert icon ( ) appears in the notification area on the right of the task bar. This indicates that the current security state of your computer is not secure. Configure the virus-scanning program to make the security alert icon disappear.

1. Select **Start** > **All Programs** > **Norton AntiVirus** > **Norton AntiVirus 2005**.
2. Click **Scan Virus**, select drive to inspect, and click **Scan**.

Vaccines for the latest viruses can be downloaded by connecting to Symantec's homepage.

3. If a virus is detected, select Automatic in Norton AntiVirus, and click **Next** to delete the virus.

Chapter 7

Recovering the Computer

This chapter provides recovery procedures using the System Recovery CD when the computer is not operating properly.

Restoring the System

Note This description is only for models running Window XP.

The System Restore function allows you to restore your computer to an earlier copy (called restore point), and restores the settings if a problem occurs.

The System Restore function is provided by Windows XP to enable the resolution of various problems without reinstalling Windows XP completely.

You can use System Restore in the following cases.

- The system files are deleted or damaged by mistake.
- The system is unstable or a problem occurs in a device driver.
- A problem occurs after changing system files such as the registry.
- A problem occurs after installing a new program.

Creating a Restore Point

Restore points are created at predetermined times and at times of significant system events such as when a program or a driver is installed. You can also decide when to create your own restore points.

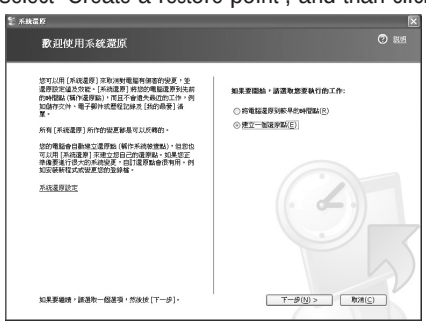
Note

There has to be more than 200MB of free space on the hard disk drive. If the disk space is insufficient, a saved restore point might be deleted.

You are recommended to create a restore point when you have purchased a new computer and before installing new programs or device drivers. Before creating a restore point, check that the computer is operating properly.

The procedures to create your own restore point are described below.

1. Click **Start > All Programs > Accessories > System Tools > System Restore.**
2. Select 'Create a restore point', and than click **Next**.

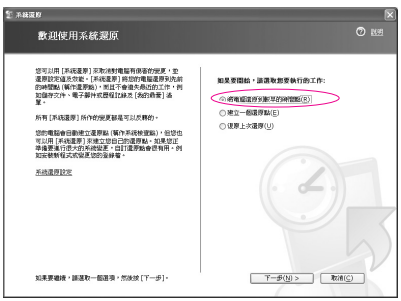


3. In the **Restore point description** box, type a name to identify the restore point, and than click **Create**. A restore point has been created.

Returning your computer to an earlier restore point

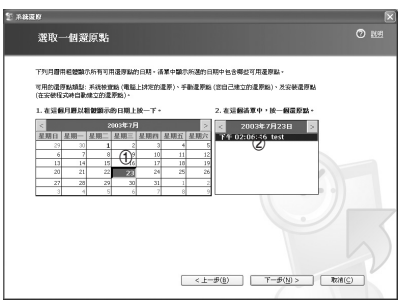
The procedures to return your computer to an earlier restore point when a problem has occurred are described below.

1. **Start > All Programs > Accessories > System Tools > System Restore**.
2. Select 'Restore my computer to an earlier time', and click **Next**.



Caution Since changes made after the Recovery Point may not be maintained, please back-up all necessary files to another location before performing system recovery.

3. Select the desired restore date (①) from the calendar restoration and select the desired restore point from the list (②), and then click **Next**.



Note The date of the restore point is displayed in bold font.

4. Confirm the selected restore point and click **Next**. System Restore shuts down Windows, and starts the restoration processes.
5. After the restoration is complete, Windows restarts. In the [System Restore completed] dialog box, click **OK**. Your computer has been restored to the selected restore point.

Undoing the last restoration

The procedures to undo a restoration are described below.

1. Click **Start > All Programs > Accessories > System Tools > System Restore**.
2. Select 'Undo my last restoration', and click **Next**.
3. Confirm the restoration information to undo, and click **Next**. System Restore shuts down Windows and starts undoing the restoration.
4. After the undo restoration is complete, Windows restarts. On the [Undo the last restoration completed] dialog box, click **OK**. Your computer has been restored to the point prior to the last restoration.

Reinstalling Software

If you have reinstalled the Windows operating system, or the system and program do not operate properly, you can re-install the driver and program using the System Software Media.

Note This computer is optimized for Microsoft Windows XP, therefore drivers for other operating systems are not included on the System software Media.

Running the system software media

Insert the system software media into the CD-ROM drive. The initial screen appears automatically.

- **Standard Installation** : This displays a list of drivers or programs that are not currently installed on your computer from the system software media provided.
  All necessary components are installed using the factory defaults.
- **Minimum Installation** : This displays the components (driver, Windows programs, etc) that, if not installed, may cause problems with the system performance. You can install only required components.
- **Custom Installation** : You can customize the installation of drivers and programs.

Installing drivers and programs

1. Click **Standard Installation** in the main window of the System Software Media. (Standard Installation is recommended)
2. The system is scanned to display the drivers and programs that need to be installed.
3. Click **OK**. The drivers and programs are automatically installed as factory defaults.

4. When done, restart the system.

Re-Installing Windows

When Windows is not operating properly due to an error on the hard disk drive, you can easily reinstall Windows using the Samsung Recovery Solution Media.

Caution

Please backup your hard disk drive.
Samsung Recovery Solution formats your hard disk drive before installing Windows. Therefore, please backup important data onto a separate storage device before reinstallation.

When using a partitioned hard disk drive:
If there is insufficient free disk space for installing Windows (approximately less than 5 GB), Windows cannot be installed.

1. Insert the **Samsung Recovery Solution** media into the DVD-ROM drive and restart your computer.
2. When the **Press any key to boot from DVD**. . . message appears, press any key on the keyboard.
   After a while, the Samsung Recovery Solution Start screen appears.
3. Read the instructions on the Start screen and click the Start button to install Windows.

SAMSUNG
Welcome
SAMSUNG Recovery Solution
Samsung Recovery Solution is a Windows clean installation tool.
After Windows installation, applications and drivers should be installed additionally via "System Software CD [or System Software Media]"
Warning
Please backup any important data before running.
All data will be lost after the installation.
If you wish to backup your data, press Cancel now and exit.
Cancel
Start

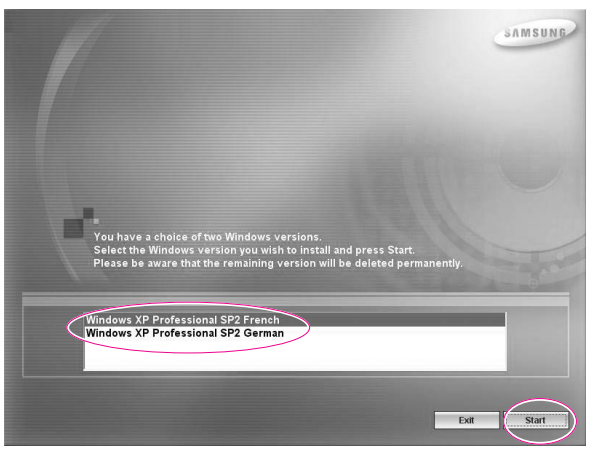
4. The Windows installation will be performed. Installation will take approximately 15~20 minutes depending on the performance of the computer.

SAMSUNG
Windows installation in progress. Do NOT turn off the system.
Installation will take approximately 15-20 minutes depending
on the system performance.

Note **If the Select Windows version (language) screen appears instead of the Windows installation screen:**

The **Select Windows version** screen may appear if you have formatted your hard disk drive. Select a **Windows version** according to the following procedures.

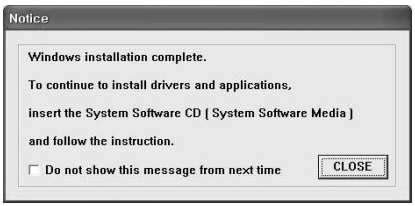
4-1 Select the **Windows version** you have used and click the **Start** button.


SAMSUNG
You have a choice of two Windows versions.
Select the Windows version you wish to install and press Start.
Please be aware that the remaining version will be deleted permanently.
Windows XP Professional SP2 French
Windows XP Professional SP2 German
Exit
Start

4-2 The Confirmation window appears. Confirm the selected Windows version and click the **Yes** button.

5. When the Windows installation is complete, the computer will automatically restart and the **Notice** window will appear.

   Insert the **System Software Media** into the DVD-ROM drive.


Notice
Windows installation complete.
To continue to install drivers and applications,
insert the System Software CD (System Software Media)
and follow the instruction.
Do not show this message from next time
CLOSE

   After a short wait, the System Software Media Start screen will appear.

Note The drivers and applications from the System Software Media need to be installed. Windows cannot be used without them.

6. Select a menu from the **System Software Media Start screen**, and install the drivers and application programs.

   When the installation is complete, the computer will automatically restart and the Windows registration screen will appear.

Note For more information about the procedures to use the **System Software Media**, refer to the descriptions of 'P. 7-4 Re-Installing Software'.

If the System Software Media consists of 2 CDs

When the installation of the first CD is complete, the Windows registration screen appears. (See Step 7) Install the second CD after registering Windows.

7. When **Start Microsoft Windows** appears, click the **Next** button.

Note Register Windows referring to the descriptions of the '**Installing and Registering Microsoft Windows**'section of the Installation Guide.

If the **System Software Media** consists of two CDs, insert the second CD for program installation into the DVD-ROM drive after completing the Windows registration.

Q&A

This section provides information on possible problems, solutions and other references for system use.

Windows Related

Q1 The system does not shutdown properly.

A When the system does not shutdown normally, press and hold the Power button until the system manually shuts off. If the Power-Saving Mode is configured into the Power button, press and hold for more than 4 seconds to shut the system off. When the system is turned on after such manual shutdown, Scandisk will run to check errors in the system.

Q2 The system freezes during program operation

A1 There is an error with the program currently being used. Press the <Ctrl>, <Alt>, and <Delete> keys simultaneously and click 'End Task in the [Windows Task Manager] window.

A2 There is an error with the Windows OS. Reboot the system by using the Power button.

Display Related

Q1 The LCD screen is too dark or too bright.

A Adjust the LCD screen brightness. Use the <Fn> + < >, <Fn> + < > keys.

Q2 The screen saver disturbs screen viewing during Media Player or video file operation.

A Unselect Tools > Option > Player > Allow screen saver during playback in the Media Player.

Q3 In DOS mode, changing the full screen DOS mode by pressing <ALT>+<Enter> key displays a broken image for a short period.

A The DOS mode which supports 2 Byte characters such as Korean and Japanese runs in graphic not in text mode. In this case, a broken image may be displayed while changing the video mode settings.

Q4 In the following cases, the screen blinks or displays noise for a short time:
(Click the Graphics Related tab, Change Resolution, Change Display Device, Remove the AC Adapter, Restart the System, Change PowerMizer level.)

A This may happen while the video driver is examining the connected device. While detecting, any connected display devices may blink or some noise may occur.

Q5 When I connect a projector, and change the setting to display screen image on both the LCD and the projector by pressing <Fn>+< > keys, screen is not displayed properly.

A Press <Fn>+< > keys once again.

Q6 The desktop momentarily appears as a broken image when zooming in or out of the Media Player screen when Media Player is running.

A Since zooming in or out of the Media Player screen changes the screen resolution, the desktop may momentarily appear as a 'broken image' during this operation.

Q7 The playback screen of a DVD title or an MPEG file is only displayed on the LCD.

A Video is displayed on a single display device by default, when LCD and CRT are selected simultaneously.

1. Right-click over the Desktop and select **Properties** from the pop-up menu.
2. In the [Display Properties] window, select the **Settings** tab **> Advanced > GeForce Go 6600** tab.
3. Select the **Full Screen Video menu> Full Screen Video Control** item, set the Full Screen Device to '**Auxiliary Display**' and then click the **Apply** button. Then you can view video on both the LCD and CRT display devices.

Q8 After connecting to a TV, some programs such as Debug, Mem, etc. do not run in full screen MS-DOS mode.

A If a TV is used as the display device, some programs such as Debug, Mem, etc. may not run properly in full screen MS-DOS mode. Run the programs in the MS-DOS window.

Q9 Switching to full screen by pressing the <Alt>+<Enter> keys while playing a music file using Media Player temporarily stops the sound.

A Zooming in or out of the Media Player screen changes the screen resolution. The sound may stop while the screen resolution is switched. Zoom in or out of the Media Player screen before playing an MP3 or MPEG file.

Q10 The Taskbar on the bottom of the screen does not appear when a projector is used as the display device.

A This may happen, because while WXGA+ and WSXGA+ LCD support 1440x900 and 1680x1050 modes respectively, the projector does not support these modes. In this case change the resolution to 1024x768 (recommended) on your computer.

Q11 Switching the MS-DOS command prompt to full screen mode or Windows mode by pressing the <Alt>+<Enter> keys does not operate properly.

A Pressing the **<Alt>+<Enter>** keys using an USB keyboard, may cause the key input to be recognized as multiple key inputs depending on the keyboard input

recognition time. In this case, the MS-DOS command prompt is repeatedly switched to full screen and then to Windows several times. Please press the **<Alt>+<Enter>** keys more quickly, or press the **<Alt>+<Enter>** keys using the system keyboard.

Q12 When a TV is connected, the Turn off monitor power option is not performed.

A When connecting a TV after booting up your computer, the Turn off monitor power option may not be performed. For it to operate properly, it is recommended to connect a TV and then booting up the computer.

Modem Related

Q1 I cannot hear the modem sound.

A1 Check that the telephone line is properly connected to the modem.

A2 Check that the modem driver is installed properly.

1. Click **Start > Control Panel > Performance and Maintenance > System**.
2. Select **Hardware** tab **> Device Manager > Modems** in the **System Properties** window, and check if there is a yellow exclamation mark on the installed modem icon. If there is, delete the modem device driver and reinstall the driver, because the yellow exclamation mark represents a not properly installed driver.
3. If there is no yellow exclamation mark, double-click the installed modem, and click **Diagnostics** tab **> Query Modem** in the **Modem Properties** window to diagnose the modem.

No message in either of Command and Response in the **Diagnostics** tab means that the modem is not operating properly.
Diagnose the modem again after restarting the system or reinstalling the driver. (You have to exit all programs using modem in the advance of diagnostics of the modem).

A3 Although I can make a connection with the modem, I cannot hear the dial tone and modem connection sound. In this case check the following list:

1. Click **Start > All Programs > Accessories > Entertainment > Volume Control**.
2. Clear the **Mute** check box in the Telephone Line item.
   (Depending on the sound driver, it may be displayed as another name such as Modem, Phone, Mono. If there is no corresponding item, click **Options > Properties > Volume Control**, select 'Playback', and select the 'Telephone Line' under the '**Display the following volume controls**'. Click **OK**.)

Q2 I cannot make a call using an extension line.

A In general, the dial tone of a PABX or a digital phone switching system is not a continuous one, unlike that of a trunk line.
Therefore, the modem may not make a call because the modem mistakes the dial tone from a PABX or a digital phone switching system as a busy tone.
In this case, complete the following procedures.

• **Using an AT command**

As an initialization command, use the command, ATX3.
Otherwise, enter the ATX3 command manually before making a call.
It can correct this problem by skipping the dial tone check step.

• **Configuring the Modem through the Control Panel**

1. Click **Start > Control Panel > Network and Internet Connections**
2. Under **See Also**, click **Phone and Modem Options**.
3. In the **Modems** tab, select the installed modem, and click **Properties**.
4. In the **Modem** tab of the **Modem Properties** window, clear the '**Wait for dial tone before dialing**' check box.
5. When the configuration is completed, click **OK**.

Q3 How do I use my modem when dialing from overseas?

A1 Check that the modem is correctly configured according to the current country. Because the values for communication may differ according to the country, you may not be able to connect via the modem due to an incorrect modem configuration.

1. Click **Start > Control Panel > Network and Internet Connections**.
2. Under **See Also**, click **Phone and Modem Options**.
3. In the **Dialing Rules** tab, click **Edit**.
4. In the **General** tab in the **Edit Location** window, select the current country from the **Country/region** radio box, specify the **Area code**, and click **OK**.

A2 Because the shape of the telephone plug may differ according to the country, you have to purchase and use the appropriate telephone plug for that particular country.

Q4 How do I receive a fax while the system is in power saving mode (Rest mode) (For Windows XP and 2000)?

A To receive a fax when the system is in power saving mode, and the operating system is Windows XP or 2000, configure the system as follows:

1. The automatic fax reception function of the fax program needs to be activated. (For more information, refer to the corresponding fax program manual.)
2. Click **Start > Control Panel > Network and Internet Connections**.
3. Under **See Also**, click **Phone and Modem Options**.
4. In the **Modems** tab, select the installed modem, and click **Properties**.
5. In the Power Management tab of the Modem Properties window, select the "With this device, exit the computer from stand-by mode" item and then click OK.

The above setting enables the modem to turn on the system and receive a fax when in power saving mode.

Wired LAN Related

Q1 <Wake On LAN> Function.

A <Wake On LAN> is a function that activates the system in rest mode when a signal (such as **ping** or **magic packet** commands) arrives from network(wired LAN).

▶ **To use <Wake On LAN> function**

1. Select **My Network Environment > View Network Connections** from the Desktop.
2. Click the right button on the touchpad over **Local Area Connection**, and select **Properties**.
3. Click **Configure...**, and select **Power Management** tab. Select '**Allow this device to bring the computer out of standby**', then click **OK**. Restart the system.

• If the system in rest mode is activated when there is no received signal, use the system after disabling <Wake On LAN> function.

• Connecting wired LAN while using wireless LAN may not execute <Wake On LAN> function. Configure wireless LAN to '**Disable**' to use <Wake On LAN> function.

1. Click on My Network Place> View network connections on the Desktop.
2. Right-click over Wireless Network Connection and select Disable.

Q2 When I connected 100Mbps wired LAN and the computer exits standby/hibernate mode, a message informing 10Mbps wired LAN connection appears.

A When the computer exits standby/hibernate mode, restoring the network takes about 3 seconds. When the network is restored, it operates in 100Mbps.

Wireless LAN Related

Refer to P.4-7 “Configuring the Network Environment Settings for Wireless LAN Network (WLAN)” for the basic uses of a wireless LAN.

Q1 The Wireless LAN device is operating properly, but I cannot connect to the Internet or to another computer.

This is due to an inappropriate configuration. Check the following check lists:

A1 If you are using a computer-to-computer (Ad Hoc) network connection, check that the name of the configured network (SSID) is correct. The network name (SSID) is case sensitive.

A2 If you are using a network key (encryption key), you have to use the same network keys for an AP (Access Point) or a computer-to-computer network (Ad Hoc). The network key of the AP is configured in the AP management program. Ask your network administrator or AP manager for more detailed information.

A3 Check that the device driver is properly installed. If the driver is not properly installed, you will find a yellow exclamation mark on the network icon by clicking **Start > Control Panel > Performance and Maintenance > System > Hardware tab > Device Manager > Network adapters > Wireless LAN adapter**. If there is a yellow exclamation mark, If a warning message apears, install the driver again using the System Software Media.

A4 Referring to A2 of Q3, check that the network bridge configuration is correct.

Q2 The signal strength is excellent, but I cannot connect to the network.

Even if the signal strength is excellent, the network connection may not operate properly if the TCP/IP properties are not properly configured, or the network key (encryption key) is incorrect.

A1 Check that the TCP/IP properties are configured properly. When you connect to an AP, click the **Wireless Network Connection** icon ( ) on the taskbar and select the Support tab. If the IP is not allocated properly, the IP address will be displayed as follows. (e.g. 169.254.xxx.xxx)
If the network does not provide DHCP, you have to specify the correct IP address by asking your network administrator.
Even if the network provides DHCP, the server may not allocate an IP address to the client properly, and the client station cannot connect to the network.

A2 Referring to A2 of Q1, check that the network key is correct.

A3 Referring to Q4, check that AP is operating properly.

Q3 I cannot share an Internet connection.

A1 It may require some time to synchronize the computers to share an Internet connection after the Internet connection sharing configuration is completed. If you cannot share Internet connection even after a longer period, restart the computer.

A2 Check if the connection between the network adapters is configured to bridge.
If there is a configured bridge connection between the network adapters through the network configuration wizard, remove the network bridge, and reconfigure the Internet connection sharing.
A bridge connection is created when you ran Network Setup Wizard from the [Network Connections] window, and selected both the internal connection adapter and another adapter in the wizard.

Q4 I cannot connect to the AP.

Check the Computer Settings

A1 Verify whether the wireless LAN function of the computer is on by doing the following. If the wireless LAN function is off, turn it on.
- For Windows XP, verify that the wireless network connection has been set to "Enable" in Start > Control Panel > Network Connections.
- If there is a Wireless LAN On/Off button, check if the wireless LAN button is pressed.

A2 Verify whether the same network key (encryption key) has been entered in both the AP and the computer.
The network key is an encryption key for encrypting data transmitted between the AP and the computer. It is recommended setting the network key manually.

Check the AP Settings

For the AP settings, refer to the User's Guide provided by the AP manufacturer.

A3 Verify whether the environment is suitable for using a wireless LAN.
The use of a wireless LAN may be restricted according to the environment and distance. Obstacles such as walls or doors affect the use of a wireless LAN.
- Install the AP in a high and open space 50cm from the wall and far removed from any other radio signal sources.

A4 Verify whether the AP is operating properly.
- When the AP is not operating normally, turn off the AP and after a short while turn it on again.
- Verify whether the AP's firmware is the most recent version. (Contact the AP manufacturer or the place where you purchased the AP for details of the AP firmware.)

A5 Verify whether the AP has been properly connected to the network.
Verify whether the network is operating normally by connecting the wired network cable, which has been connected to the AP, to your computer.

A6 Check the network key settings (encryption key).
When automatic code conversion (a passphrase function) has been selected and data communication is not functioning even with a normal wireless connection, it is recommended entering the network key (encryption key) manually.

A7 Check the AP settings as follows. (The following is recommended for a standard environment and thus may differ according to the specific wireless network environment.)

- When several APs are present simultaneously, check the channel setting for each AP. When different APs are using nearby channels, interference may occur between electronic waves. Set the APs' channels further apart from each other. (Ex: Ch1, Ch5, Ch9, Ch13)
- When an AP's SSID (Service Set ID) option is set to "Hide", you cannot search for that AP on the computer. We recommend canceling the "Hide" option for an AP. The SSID is a name for distinguishing one wireless LAN from another wireless LAN.
- It is recommended using Long Preamble. Preamble is a signal for data transmission synchronization. Short Preamble may be supported by some types of APs but may cause compatibility problems.
- It is recommended using a static IP.
- Since static channel selection is more reliable than auto channel selection, it is recommended setting a static channel.

Q5 In the Windows XP 'Available wireless networks' window, the Wireless Network Connection is displayed as 'Not Available'.

A1 When there is a Wireless LAN button, ensure that the Wireless LAN button is turned on.

A2 Check if there is additional program for a wireless LAN connection installed. Windows XP supports wireless LAN connections through the Wireless Zero Configuration (WZC) service. Therefore, an additional program for wireless LAN connection is not required, unless the network requires a specific program. However, installation of some wireless LAN related programs may sometimes disable the [View Available Wireless Networks] window supported by WZC service. Exit the wireless LAN related program then check whether the window is enabled.

A3 Initialize the device driver.
Click **Start > Control Panel > Performance and Maintenance > System > Hardware tab > Device Manager > Network adapters**, and select the wireless LAN adapter. Right-click the network adaptor and select 'Disable' from the popup menu. Then right-click over the network adaptor and select 'Enable' after a short wait to check that the device is operating properly.

A4 Right-click the My computer icon, and select **Manage**. When the Computer Management window appears, double-click **Services and Applications** on the left, and then click **Services** from the sub menu tree. Select the Standard tab in the right pane, double-click **Wireless Zero Configuration** and check that Startup Type is configured to **Automatic**, and the Service status is **Started**.

A5 In the case of Windows XP, click Advanced in the [Wireless Network Connection] dialog box (see p.4-8 'Connecting to an AP') and make sure that 'Use Windows to configure my wireless network settings' is selected.
This may happen when a third-party wireless network setup program (e.g. PROSet) other than Windows XP default program is installed. For setting up a wireless network using the Windows XP program, this option should be selected.

Q6 When connecting to a computer-to-computer (Ad Hoc) network, I cannot connect to another computer connected to the same computer-to-computer network.

A1 Make sure that the security settings and network name of the computer-to-computer (Ad Hoc) network is correct.

A2 Check the TCP/IP properties of the computers to be connected through the computer-to-computer (Ad Hoc) network. All of the computers to be connected through a computer-to-computer (Ad Hoc) network should be configured so that their IP addresses are within the same subnet range.

- If the TCP/IP Settings are configured to DHCP, the address is automatically configured to an address within the subnet IP range. This will take about 2~3 minutes.
- If the IP address is configured to static IP in TCP/IP properties, select **Use the following IP address** in the TCP/IP properties of the wireless adapter, configure IP address:10.0.0.1~10.0.0.254, and Subnet mask: 255.255.255.0, and then try again.
- A fixed IP is recommended for a small-size network.

Q7 When using a computer-to-computer (Ad Hoc) network, sometimes I cannot search the access point.

A It may happen occasionally when you are using a computer-to-computer (Ad Hoc) network connection. Even if you cannot find some access points, the computer-to-computer (Ad Hoc) network is operating properly. Click **Refresh** to view the latest search result.

Q8 Running Help file while running Profile Wizard in the wireless LAN program (PROSet) makes the PROSet window white.

A It will be displayed properly when you finish the profile wizard. It dose not affect the program operation.

Q9 The network does not operate properly when both the wireless and the wired network connections are simultaneously configured with the same IP address.

A You cannot use the wireless and the wired network connections using the same IP address simultaneously. To use either the wireless or the wired network in turn with the same IP address, you have to Disable whichever network device will not be using in the network connection of the Control Panel.

Q10 The wireless LAN does not work properly when there is a device operating on an adjacent frequency in the vicinity of the product.

A1 Channel interference may occur when a wireless video transceiver or a microwave oven is being used.If you experience channel interference from other equipment, it is recommended changing the channel to connect to the AP. For more information about AP settings, refer to the User Manual supplied by the AP manufacturer.

A2 IEEE802.11g equipment operates in hybrid mode when there is active IEEE802.11b equipment. This may result in data rate degradation.

Q11 An established wireless LAN connection is disconnected after 2~3 minutes, and the connection is not recovered.

A1 This may be caused by channel interference. Change the channel of the AP, and reconnect.

A2 This may be caused by selecting the 'Use IEEE 802.1x network authentication' option when IEEE 802.1x authentication is not available.
Check the properties of the AP in the wireless network settings. If the 'Use IEEE 802.1x authentication in this network' option is selected, deselect the option on the Authentication tab.For more detailed information about authentication server, ask your network administrator.

A3 If the AP is configured to 'Use network authentication (Shared Key)'
If the AP is configured to authentication shared mode, all computers to be connected should be configured as follows:

- If you are using Windows XP, select network authentication(shared mode) in the wireless network settings.

Select Start > Control Panel > Network and Internet Connections > Network Connections, right-click the Wireless Network Connection icon and then select View Available Wireless Networks.
Select Change Advanced Settings from the left menu, select an AP from Preferred networks window in the Wireless Networks tab, and click the Properties button. Select Shared Mode in the Network Authentication field of the Association tab, and then click the OK button.
If the Preferred networks window in the Wireless Network tab is empty, click View Wireless Networks, select an AP to connect to, and select Shared Mode in the Network Authentication field of the Connection Information tab as described above. For more detailed network authentication procedures, ask your AP (Access Point) administrator.

Q12 After PROSet is installed, The "AEGIS Protocol (IEEE 802.1x) v2.2.1.0" appears in the [Local Area Connection Properties] window.

A The AEGIS Protocol is a security authentication protocol that is automatically installed when PROSet is installed and does not affect the operation of other programs.

Q13 Although I have turned the wireless LAN off using the Off Button on the PROSet, the wireless LAN operating light is still on.

A This is normal. The Off Button for the Wireless LAN on the PROSet only turns off the S/W and not the H/W for the Wireless LAN.

Q14 After installing the PROSet, I cannot manage the wireless network under Windows.

A Click on "Use Microsoft Client" in the Tools menu of the PROSet program to manage a wireless network in Windows. To manage a wireless network in the PROSet program, click on "Use Inter PROSet/Wireless" in the Tools menu of the PROSet program.

Game/Program Related

Q1 3D game is not executed, or some functions are not working.

A Change the graphic setting of the game to '2D' or 'Software Renderer', then execute the program again.

Q2 I launched a game right after installing it, and the game is not executed.

A This problem may occur when the game is not compatible with Windows XP. Launch the game again, and it will be executed properly.

Q3 While playing a 3D game, I tried to change display devices using <Fn> + <F4> keys, then the system does not operate.

A When you use <Fn> + <F4> keys while playing a 3D game, a system error may occur.
Do not use <Fn> + <F4> keys while playing a 3D game.

Q4 <Fn>+<F4> Key combination does not work.

A While displaying video of VCD or MPEG, or the display setting is Dual View, you cannot toggle display devices. Also the installation of NetWare Client 32 program disables the function of <Fn>+<F4>.

Q5 While playing a game, pressing the <Fn>+<F4>keys does not work or the screen is not properly displayed.

A Some games and 3D application programs may change the display device control. Therefore, pressing the <Fn>+<F4> keys may terminate the running program or may display an abnormal screen.
Press the <Fn>+<F4> keys before launching a program and do not press them while running the program.

Q6 Running speed of a game is too slow or fast.

A Change the setting of Power Schemes to '**Always On**'.
(Click **Start > Control Panel > Performance and Maintenance > Power Options > Power Schemes** tab, then configure the **Power schemes** field to '**Always On**'.)

Q7 Pressing <Fn>+< **> keys while running a game may cause abnormal operation of the system.**

A Do not press <Fn>+< > keys while a game is running, because it may cause a system error.

Q8 Some part of a game image is not displayed or is displayed in black.

A This may happen when running a game designed for DirectX 8.1, such as NHL 2003, MVP Baseball 2003, etc.

Q9 The game screen is displayed small.

A This may happen when the display settings are set to zoom out mode ('Use center output'). Change the settings as follows to fit the game screen to the LCD screen.

1. Right-click over the Desktop and select **Properties** from the pop-up menu.
2. In the [Display Properties] window, select the **Settings** tab **> Advanced > GeForce Go 6600** tab.
3. Select the **nView** item, set the nView mode to '**Single Display**' and set the Current Display to '**Laptop Display**'.
4. Right-click over the figure of the Digital Display Device and then click **Adjust Screen**.
5. Select '**Use Display Adapter Scaling**' and then click the **Apply** button.

Q10 The game play screen frequently stops and starts.

A This may happen when the PowerMizer Settings are set to '**Maximum Power Saving Function**' or '**Balanced**'.

1. Right-click over the Desktop and select **Properties** from the pop-up menu.
2. In the [Display Properties] window, select the **Settings** tab **> Advanced > GeForce Go 6600**.
3. Select the **PowerMizer** item, slide the AC outlet and the battery sliders to **Maximum Performance** and then click the **Apply** button.

Q11 The picture is not displayed properly for some games.

A Some games such as 'Harry Potter and the Sorcerer's Stone', 'Harry Potter and the Chamber of Secrets', etc. may not display the picture properly when the screen resolution is set to 1024x768 and the color quality is set to 32 bit.
For these games, set the screen resolution to 1024x768, and the color quality to 16 bit.

Q12 Game play is not displayed smoothly on the screen.

A For 3D games, the texture data for the 3D screen display is saved to the system memory. If there is insufficient system memory, the data is saved to the hard disk drive and loaded to memory when required. This operation may temporarily stop displaying the picture on the screen.
In this case, lower the game resolution or the screen settings. (For Delta Force: Black Hawk Down, Medal of Honor, Battle Field, 1942, etc.)

Security Center

Q1 To change the popup window display settings when connected to the Internet.

In the Windows XP SP2 environment, you can decide whether to display a popup window when connected to the Internet, for user convenience and security.

A1 To display most of the popup windows when connected to the Internet:

1. Click on Internet Options in Start > Control Panel > Security Center > Manage security settings for.
2. In the Privacy tab of Internet Properties, clear Block pop-ups.

A2 To display popup windows only from the current site when connected to the Internet:

Place the cursor on the notification area at the bottom of the Internet address bar and right-click to display a menu, from which you can select Temporarily Allow Pop-ups or Always Allow Pop-ups from This Site.

A3 To display popup windows from a particular site:

1. Click on Internet Options in Start > Control Panel > Security Center > Manage security settings for.
2. In the Privacy tab of Internet Properties, click on Settings from Block pop-ups.
3. Enter a URL to want to allow pop-ups into Address of Web site to allow and click on Add.
4. You will find that the entered address is added to the allowed sites list. The next time you connect to the Web site, you will see pop-ups appearing. When you need to re-block a permitted site, select the Web site address that you want to block from the Allowed Sites and click on Remove.

Q2 When you connect to a Web site, you see the message, "To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer"or "This site might require the following ActiveX control" below the address bar.

A Windows XP SP2 blocks unsigned ActiveX controls from being installed when connected to certain Web sites for security reasons. On some Web sites that have no ActiveX controls installed, applications are not started or do not display properly. In this case, to install ActiveX controls, right-click the notification area to display a menu from which you can select Install ActiveX control.

Q3 When you see a Windows Security Alert icon appear on the right part of the task bar.

With the Security Center feature added, Windows XP SP2 checks the Firewall, the automatic updates configuration and installation of virus-checking programs to display a Windows Security Alert icon on the right part of the task bar when it judges that the computer is vulnerable to attacks from the Internet. In this case, check the following to install the necessary components.

A1 Set up the Windows Firewall. When you set up the Windows Firewall, you will be protected from unauthorized access through the Internet or the network.

1. Click on Windows Firewall in Start > Control Panel > Security Center > Manage security settings for.
2. From the General tab of Windows Firewall, select ON (recommended).
3. If you want to allow a certain program or service to gain access to your computer using the Firewall, select and check the program or service that you want to allow access from, in the Exceptions tab of the Windows Firewall. If you want to add a program to Programs and Services, click on Add Program and select it.

A2 Set up Windows Automatic Updates.
This automatically downloads and installs critical updates via the Internet to keep your computer up to date.

1. Click on Automatic Updates in Start > Control Panel > Security Center > Manage security settings for.
2. From general tab of Automatic Updates window, select Automatic (recommended).

A3 Keep your computer current with the latest virus updates. (ex: Norton Antivirus)
Even when you have installed Norton AntiVirus on your computer, Windows cannot recognize the program until you configure the settings, displaying a Security Alert icon. When you first use or install Norton AntiVirus for the first time, follow the Registration Wizard steps to configure the registration settings. To protect your computer from virus attacks with the latest updates, click on Options to display the Norton AntiVirus Options window. From the left menu of the window, check Run Automatic Protection to select Automatic Protection and check Run LiveUpdate to select LiveUpdate.

A4 Two virus scanning programs on one computer may cause system conflicts. Remove one of the programs from the system.

A5 If Windows does not recognize the existence of an anti-virus program even when it has been installed, your computer could be vulnerable to attacks from the Internet. You should install an anti-virus program that your computer is able to identify.

Check the following programs which Windows can detect and select one from the list.

A list of anti-virus programs that Windows can detect:

- Symantec Norton Anti-Virus
- NetworkAssociates (McAfee)
- TrendMicro
- ComputerAssociates
- Panda
- Kaspersky
- Ahnlabs (AhnLab)

Note The list is subject to change. Visit the Microsoft Web site (www.microsoft.com) regularly to check the latest list.

Appendix

Appendix

System specifications, software types and safety instructions are provided here.

System Specifications

The system specifications will be described below. The system specifications may differ depending on the derived models.

Item	Specification	Comment
CPU	Intel Pentium M (Dothan) Processor (FSB 533 MHz) Intel Centrino (Intel Mobile Technology, Pentium M + Wireless LAN)	Optional
Cache memory	2MB (Dothan)	
Main memory	256/512/1024 MB DDR2 SODIMM, 2 DDR2 socket	Max 2GB
Main Chipset	Intel 915PM + ICH6-M	
Hard Disk (HDD)	2.5", UltraDMA100, S.M.A.R.T 9.5mmH / SATA	Optional
CD Drive	CD-RW/DVD-ROM Combo, DVD-Super Multi	Optional
Graphics	Nvidia Geforce Go 6600 (NV43M), 64MB/128MB	Optional
Sound	High Definition Audio Codec AD 1986A	
Network Interface	Modem : V.92	
	Wired LAN : Broadcom BCM5788 1G Ethernet UTP	
	Wireless LAN : 802.11BG or 802.11ABG	Optional
	Bluetooth 1.2	Optional
Memory Card Slot	Memory Stick, Memory Stick Pro, SD Card, MMC and XD Card Supported	
PCMCIA Slot	Type I and II Compatible, 1 slot	
Ports	IEEE 1394 (6 Pin), USB 2.0 x 4, Microphone, Headphone (S/PDIF Support), Modem(RJ-11), LAN(RJ-45), Monitor, TV Out(S-Video)	
Dimensions (mm)	395 x 278.8 x 30.5~35.4	Width x Depth x Height
LCD Panel Size	17" WXGA+ (1440 x 900), 17" WSXGA+ (1680 x 1050)	Optional
Weight	2.99 Kg	
Battery	Lithium-Ion smart battery	
Operation Environment	Temperature for custody : -5~40°C for operation: 10~32°C Humidity for custody : 5~90% for operation: 20~80%	
Operation Voltage	100 - 240VAC	
Frequency	50 - 60Hz	
Output Power	90W	
Output Voltage	19.0 VDC	

The system specifications are subject to change without notice. For detailed system specifications, refer to the product catalog.

Wireless LAN Specifications (Optional)

Intel(R) PRO/Wireless 2200BG Network Connection

Item		Specifications
Physical Specifications	Dimensions	59.75 X 44.45 mm (Width X Height)
	operation temperature and humidity	Same as system operation specifications Temperature: 0 ~ 70°C, Humidity: less than 85%
Power Specification	Power Saving Mode	135mW
	Receiving Mode	0.85W
	Transmission Mode	1.45W
	Power	3.3V
Network Specifications	Compatibility	IEEE 802.11g, IEEE 802.11b
	Operating System	Microsoft Windows XP - NDIS5 Miniport Driver
	Media Access Protocol	CSMA/CA (Collision Avoidance) with Acknowledgement (ACK)
	Security	Wired Equivalent Privacy support (WEP) 64bit/128bit WPA*, CCX*

* This piece of equipment supports the Wi-Fi wireless LAN security standard, WPA (Wi-Fi Protected Access) and CCX (Cisco Compatible eXtensions). To connect to a wireless network consisting of the WPA and CCX, 1.2.2.8 or higher version of wireless LAN driver have to be installed on your computer, and certificates or PROSet may be required depending on the network settings. For driver update, visit www.samsung.com and for information on the PROSet installation, refer to P.4-13 "Wireless Network Setup Using the Wireless LAN Setup Program" . For more information, ask your network administrator.

RF Specifications

R-F Frequency Band	2.4GHz
Support Channels	Channels allowed per country.
Device Description	Transceiver
Power	5 mW
Transmission Method	11b mode: DSSS 11g mode: OFDM
Data Rate (Mbps)*	11b mode: 11, 5.5, 2, and 1 11g mode** : 54, 48, 36, 24, 18, 12, 9, and 6
Antenna Type	Internal Antenna 2 EA (main/aux)

* The data rate may differ from the actual data rate.
** 11g mode is supported only when the device is connected with an IEEE802.11g device (e.g. IEEE802.11g compatible Access Point).

Intel(R) PRO/Wireless LAN 2915ABG Network Connection

Item		Specifications
Physical Specifications	Dimensions	59.75 X 44.45 mm (Width X Height)
	operation temperature and humidity	Same as system operation specifications Temperature: 0 ~ 70°C, Humidity: less than 85%
Power Specification	Power Saving Mode	135mW
	Receiving Mode	0.85W
	Transmission Mode	1.45W
	Power	3.3V
Network Specifications	Compatibility	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g,
	Operating System	Microsoft Windows XP - NDIS5 Miniport Driver
	Media Access Protocol	CSMA/CA (Collision Avoidance) with Acknowledgement (ACK)
	Security	Wired Equivalent Privacy support (WEP) 64bit/128bit WPA*, CCX*

* This piece of equipment supports the Wi-Fi wireless LAN security standard, WPA (Wi-Fi Protected Access) and CCX (Cisco Compatible eXtensions). To connect to a wireless network consisting of the WPA and CCX, 1.2.2.8 or higher version of wireless LAN driver have to be installed on your computer, and certificates or PROSet may be required depending on the network settings. For driver update, visit www.samsung.com and for information on the PROSet installation, refer to P.4-13 "Wireless Network Setup Using the Wireless LAN Setup Program" . For more information, ask your network administrator.

RF Specifications

R-F Frequency Band	2.4GHz, 5GHz
Support Channels	Channels allowed per country.
Device Description	Transceiver
Power	5 mW
Transmission Method	11a mode : OFDM 11b mode : DSSS 11g mode : OFDM
Data Rate (Mbps)*	11a mode** : 54, 48, 36, 24, 18, 12, 9, and 6 11b mode : 11, 5.5, 2, and 1 11g mode*** : 54, 48, 36, 24, 18, 12, 9, and 6
Antenna Type	Internal Antenna 2 EA (main/aux)

* The data rate may differ from the actual data rate.
** 11a mode is supported only when the device is connected with an IEEE802.11a device (e.g. IEEE802.11a compatible Access Point).
*** 11g mode is supported only when the device is connected with an IEEE802.11g device (e.g. IEEE802.11g compatible Access Point).

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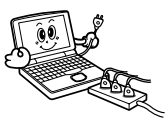
Safety Instructions

Instructions for Setup

- **Set up the system on a stable work surface.**
  If the system is dropped it may be damaged or it may inflict injuries on the user.

- **Do not use loose power outlets or damaged power cables.**
  There is a danger of electric shocks or fires.

- **Set up the system in a clean, dry and airy place.**
  If the system overheats, it may be damaged or it may cause fires.



- **Use standard power voltage.**
  High-voltage may result in product damage or cause fires.

- **Use grounded power outlets designed for computers.**
  A grounded power outlet prevents electric shock from electricity leakage.

- **Set up the system away from magnetic objects.**
  Contents of the hard disk drive may be deleted or the color of the monitor may be permanently distorted.

- **Dispose of moisture-reducing agents and plastic packaging properly.**
  Consumption of moisture-reducing agents and placing plastic packaging over the head is fatal, especially for children.

Instructions for careful handling

- **Handle with care so as not to damage the data in the hard disk.**
  - Since the hard disk is fragile and sensitive to external conditions, it may be damaged from temperature changes or impact during operation. Take extra care to prevent such damages.
  - Loss of data due to external conditions or carelessness during use is the user's sole responsibility and the manufacturer shall not be held liable for any compensation.

In order to minimize damages from data loss, please backup data at all times.

Cases when the hard disk and data may be damaged:

- External impacts while separating from or installing into the computer may cause disk or data damage.
- Power failure during hard disk operation resulting in resetting the computer may cause disk or data damage.
- Execution of delete (DEL) or format (FORMAT) commands by mistake may cause loss of data.
- Virus infection may cause unrecoverable loss of data.
- An abrupt power cut during program operation may cause disk or data damage.
- Moving the computer, or impacts to the computer during hard disk operation may cause data loss or bad sectors on the hard disk.

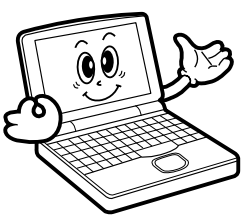
- **Be sure to make backup copies of important data.**
  The Manufacturer is not liable for lost data.
- **Turn on peripheral devices before, turning on the computer**
  Otherwise damages may occur.
- **Turn off the computer before turning off other peripheral devices.**
  Otherwise damages may occur.
- **Do not touch the modem, telephone lines and exposed electrical terminals during a thunder storm**
  There is a danger of electric shocks or fires.
- **Before disassembling the system, turn the power off and disconnect the power cable.**
  There is a danger of electric shocks.

- **Use only authorized parts and do not disassemble, repair or modify the computer unless at an authorized dealer.**
  Use authorized service centers as the system may be damaged.

- **Do not touch the power strip with wet hands.**
  There is a danger of electric shock.

- **Place the computer away from heat devices (such as heaters).**
  It may damage the system or cause fires.

- **Clean with cleaners specifically for computers**
  Do not use benzene, paint thinner, or alcohol to clean the computer. It may damage the product.



Customer Service Center

General Enquiry Hotline: 2862-6001
Technical Support Hotline: 2862-6406
E-mail: service@sehk.samsung.com

Web Site:

http://www.samsungelectronics.com.hk

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